

PEZZUTO

10/551268

9/18/07

1

=> FILE REG

FILE 'REGISTRY' ENTERED AT 12:38:15 ON 18 SEP 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 17 SEP 2007 HIGHEST RN 947369-26-8
DICTIONARY FILE UPDATES: 17 SEP 2007 HIGHEST RN 947369-26-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> FILE HCAPL

FILE 'HCAPLUS' ENTERED AT 12:38:20 ON 18 SEP 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
the American Chemical Society and is provided to assist you in searching
databases on STN. Any dissemination, distribution, copying, or storing
of this information, without the prior written consent of CAS, is
strictly prohibited.

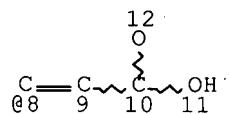
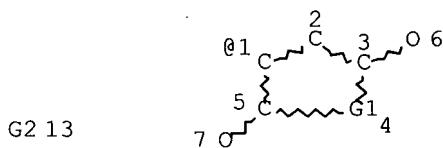
FILE COVERS 1907 - 18 Sep 2007 VOL 147 ISS 13
FILE LAST UPDATED: 17 Sep 2007 (20070917/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> D QUE

L5 STR



VAR G1=N/O

VAR G2=1/8

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 6

CONNECT IS E1 RC AT 7

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

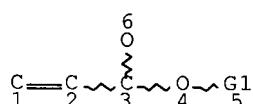
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

L6 SCR 2043

L8 STR



VAR G1=AK/CB

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE

L10 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 4

STEREO ATTRIBUTES: NONE

L12	5388 SEA FILE=REGISTRY SSS FUL L10 AND L5 AND L8 AND L6	
L13	4477 SEA FILE=HCAPLUS ABB=ON L12	
L14	45 SEA FILE=HCAPLUS ABB=ON L13 AND CEMENT#	
L15	46 SEA FILE=HCAPLUS ABB=ON L13 AND CONCRETE#	
L16	73 SEA FILE=HCAPLUS ABB=ON L14 OR L15	
L17	45 SEA FILE=HCAPLUS ABB=ON L16 AND (CEMENT? OR CONCRETE?) /SC, SX	
L18	95 SEA FILE=HCAPLUS ABB=ON L13(L)MOA/RL	
L19	7 SEA FILE=HCAPLUS ABB=ON L18 AND (CEMENT? OR CONCRETE?) /SC, SX	
L20	45 SEA FILE=HCAPLUS ABB=ON L17 OR L19	
L21	1 SEA FILE=REGISTRY ABB=ON "POLYETHYLENE GLYCOL MONOMETHYL ETHER"/CN	
L24	1 SEA FILE=REGISTRY ABB=ON 50856-25-2	
L25	1 SEA FILE=REGISTRY ABB=ON "METHACRYLIC ACID"/CN	
L26	1 SEA FILE=REGISTRY ABB=ON "MALEIC ACID"/CN	
L27	1 SEA FILE=REGISTRY ABB=ON 105-76-0	
L28	1 SEA FILE=REGISTRY ABB=ON 96-33-3	
L29	1 SEA FILE=REGISTRY ABB=ON 818-61-1	
L30	1 SEA FILE=REGISTRY ABB=ON 25584-83-2	
L31	1 SEA FILE=REGISTRY ABB=ON 27813-02-1	
L32	1 SEA FILE=REGISTRY ABB=ON "METHYL 2-METHYL-2-PROPENOATE"/CN	
L33	1 SEA FILE=REGISTRY ABB=ON "ETHYL 2-METHYL-2-PROPENOATE"/CN	
L34	1 SEA FILE=REGISTRY ABB=ON "ISOBUTYL 2-METHYL-2-PROPENOATE"/CN	
L35	1 SEA FILE=REGISTRY ABB=ON "ISOBUTYL 2-PROPENOATE"/CN	
L36	1 SEA FILE=REGISTRY ABB=ON "BUTYL 2-PROPENOATE"/CN	
L37	1 SEA FILE=REGISTRY ABB=ON "BUTYL 2-METHYL-2-PROPENOATE"/CN	
L39	1 SEA FILE=REGISTRY ABB=ON 999-61-1	
L40	1 SEA FILE=REGISTRY ABB=ON "2-HYDROXYETHYL METHACRYLATE"/CN	
L41	1 SEA FILE=REGISTRY ABB=ON "2-HYDROXYETHYL ACRYLATE"/CN	
L42	1 SEA FILE=REGISTRY ABB=ON 9002-89-5	
L43	1 SEA FILE=REGISTRY ABB=ON 79-10-7	
L44	1 SEA FILE=REGISTRY ABB=ON 108-31-6	
L45	3 SEA FILE=REGISTRY ABB=ON L21 OR L24 OR L42	
L46	6403 SEA FILE=HCAPLUS ABB=ON L45/D	
L47	4 SEA FILE=REGISTRY ABB=ON L43 OR L44 OR L25 OR L26	
L48	50972 SEA FILE=HCAPLUS ABB=ON L47/D	
L53	414 SEA FILE=HCAPLUS ABB=ON L46(L)MOA/RL	
L55	5430 SEA FILE=HCAPLUS ABB=ON L48(L)MOA/RL	
L58	16 SEA FILE=REGISTRY ABB=ON (L27 OR L28 OR L29 OR L30 OR L31 OR L32 OR L33 OR L34 OR L35 OR L42 OR L43 OR L44) OR L42 OR L43 OR L44)	
L59	56725 SEA FILE=HCAPLUS ABB=ON L58/D	
L60	5420 SEA FILE=HCAPLUS ABB=ON L59(L)MOA/RL	
L61	27 SEA FILE=HCAPLUS ABB=ON L53 AND L55 AND L60	
L64	7 SEA FILE=HCAPLUS ABB=ON L61 AND (CEMENT? OR CONCRETE?) /SX, SC	
L65	339 SEA FILE=HCAPLUS ABB=ON L46 AND L48 AND L59	
L66	18 SEA FILE=HCAPLUS ABB=ON L65 AND (CEMENT# OR CONCRETE#)	
L67	16 SEA FILE=HCAPLUS ABB=ON L66 AND (CEMENT? OR CONCRETE?) /SX, SC	
L68	16 SEA FILE=HCAPLUS ABB=ON L64 OR L67	
L69	59 SEA FILE=HCAPLUS ABB=ON L20 OR L68	

=> D L69 BIB ABS HITIND HITSTR

L69 ANSWER 1 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 2007:906225 HCAPLUS Full-text

DN 147:258156

TI Water-soluble, sulfo group-containing copolymers, procedures for their
production and their use

IN Friedrich, Stefan; Schinabeck, Michael; Tselebidis, Andreas; Nachreiner,

Michael

PA Construction Research & Technology GmbH, Germany
 SO Ger. Offen., 22pp.
 CODEN: GWXXBX

DT Patent
 LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 102006007004	A1	20070816	DE 2006-102006007004	20060215
	WO 2007093392	A1	20070823	WO 2007-EP1249	20070213
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
PRAI DE 2006-102006007004 A 20060215					

AB Water-soluble, sulfo group-containing copolymers are prepared for use as stabilizers, rheol. modifiers and water-retention agents in aqueous building materials based on hydraulic binders and for use in waterborne paints and coatings. The copolymers contain (A) 40-93.89 mol% CH₂CR₁(CONCR₂R₃CHR₄SO₃Ma) units [R₁ = H or Me; R₂, R₃, R₄ = H, C₁-6 aliphatic hydrocarbyl, or (substituted) Ph; M = H, 1- or 2-valent metal cation, NH₄, or organic amine group; a = 1/2 or 1], (B) 6-59.89 mol% CH₂CR₁(COYVN+R₅R₆R₇)X units [Y = O, NH, or NR₅; V = (CH₂)_x, p-C₆H₄, or 1,4-cyclohexylene; R₅, R₆ = (substituted) C₁-20 aliphatic hydrocarbyl, (substituted) C₅-6 cycloaliph. hydrocarbyl, (substituted) C₆-14 aryl; R₇ = R₅, R₆, (CH₂)_xSO₃Ma, p-C₆H₄SO₃Ma, or hydrogenated p-C₆H₄SO₃Ma; x = 1-6; X = F, Cl, Br, I, C₁-4-alkyl sulfate, or C₁-4-alkanesulfonate; R₁ = H or Me; M = same as in (A)], (C) 0.1-10 mol% CH₂CR₁(Z) units [Z = (CH₂)_qO(C_nH₂nO)pR₈ or CO₂(C_nH₂nO)pR₈; n = 2-4; p = 1-200; q = 0-20; R₈ = H, C₁-4 alkyl; R₁ = H or Me], and(or) (D) 0.01-0.5 mol% CH₂CR₁(U) units [U = CO₂(C_nH₂nO)pR₉ or (CH₂)_qO(C_nH₂nO)pR₉; R₉ = C₆H₄-yR₁₀y, or C₁₀-30 alkyl; R₁₀ = H, C₁-6 alkyl, ar-C₁-6-alkyl, or C₆-14 aryl; y = 1-3; R₁ = H or Me; n = 2-4; p = 1-200; q = 0-20]. Optionally, the copolymers contain ≤15 mol% CH₂CR₁(WNR₅R₆) units [W = CO₂(CH₂)_m or CONR₂(CH₂)_m; m = 1-6; R₁ = H or Me, R₂, R₅, R₆ = same as in (A) and (B)] and(or) ≤30 mol% CH₂CR₁(CO₂Ma) units [R₁, M, a = same as in (A)]. A typical copolymer was manufactured by dissolving 9.2 g NaOH, 47.6 g 2-acrylamido-2-methylpropanesulfonic acid, 17.2 g (3-methacrylamidopropyl)trimethylammonium chloride (50% aqueous solution), 0.39 g polyethylene glycol tristyrylphenyl ether methacrylate (60% aqueous solution) in water, adding 5% aqueous NaOH solution (resulting pH 7), adding 13.6 g polyethylene glycol vinyl Bu ether (60% aqueous solution) and radically polymerizing 4 h at 80°.

CC 35-4 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 42, 58

IT Concrete modifiers

Dispersing agents

Mortar

Plaster

Plasticizers

(water-soluble, sulfo group-containing amphoteric copolymers for hydraulic building material additives and waterborne paints)

IT 945669-68-1P 945669-69-2P 945669-70-5P 945669-71-6P

PEZZUTO

10/551268

9/18/07

5

945669-72-7P 945669-73-8P 945830-68-2P 945830-70-6P 945830-72-8P
 945830-74-0P 945830-75-1P 945830-89-7P 945831-03-8P 945831-05-0P
 945831-07-2P 945831-08-3P 945831-10-7P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use);
 ; TEM (Technical or engineered material use); PREP (Preparation); USES
 (Uses)

(water-soluble, sulfo group-containing amphoteric copolymers for hydraulic
 building material additives and waterborne paints)

IT 945669-71-6P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use);
 ; TEM (Technical or engineered material use); PREP (Preparation); USES
 (Uses)

(water-soluble, sulfo group-containing amphoteric copolymers for hydraulic
 building material additives and waterborne paints)

RN 945669-71-6 HCPLUS

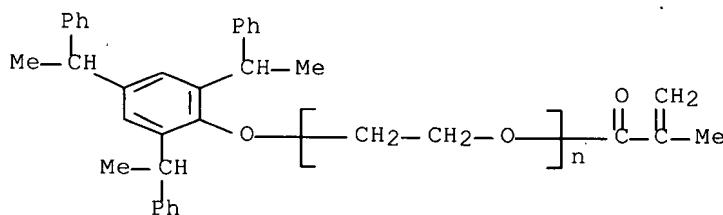
CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propen-1-yl)amino]-,
 chloride (1:1), polymer with α -butyl- ω -(ethoxyloxy)poly(oxy-
 1,2-ethanediyl), α -(2-methyl-1-oxo-2-propen-1-yl)- ω -[2,4,6-
 tris(1-phenylethyl)phenoxy]poly(oxy-1,2-ethanediyl), sodium
 2-methyl-2-[(1-oxo-2-propen-1-yl)amino]-1-propanesulfonate (1:1) and
 sodium 2-propenoate (1:1), graft (CA INDEX NAME)

CM 1

CRN 174200-85-2

CMF (C₂ H₄ O)_n C₃₄ H₃₄ O₂

CCI PMS

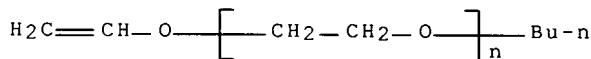


CM 2

CRN 126662-55-3

CMF (C₂ H₄ O)_n C₆ H₁₂ O

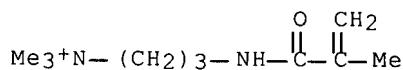
CCI PMS



CM 3

CRN 51410-72-1

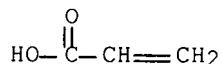
CMF C₁₀ H₂₁ N₂ O . Cl



● Cl⁻

CM 4

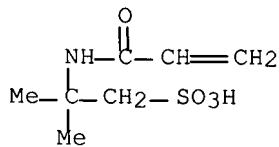
CRN 7446-81-3
CMF C3 H4 O2 . Na



● Na

CM 5

CRN 5165-97-9
CMF C7 H13 N O4 S . Na



● Na

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

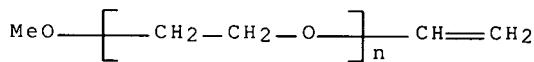
=> D L69 BIB ABS HITIND HITSTR 2-59

L69 ANSWER 2 OF 59 HCPLUS COPYRIGHT 2007 ACS on STN
AN 2007:261803 HCPLUS Full-text
DN 146:364049
TI Copolymer containing oxyalkylene diol alkenyl ether and unsaturated dicarboxylic acid derivatives and uses as **concrete** modifier
IN Eiblesitter, Gehart; Weissman, Joseph; Panknin, John; Karn, Alfred
PA Architectural Technology Co., Ltd., Germany
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 25pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CN 1919884	A	20070228	CN 2005-10093557	20050826
PRAI CN 2005-10093557		20050826		
AB	The title copolymer contains 10-90 mol% unsatd. dicarboxylic acid derivs., 1-89 mol% oxyalkylene diol alkenyl ether, ester derivs., polyalkylene diol vinyl ether, etc., and 0.1-10 mol% crosslinking agent such as a polydimethylsiloxane compound. The copolymer has good and durable liquefaction effect and no pore introduction to the cementing mixture, and can be used as water-hardening cementing agent and cement additive to prevent the decrease of strength and stability of hardened construction materials.			
CC	58-2 (Cement, Concrete, and Related Building Materials)			
ST	Section cross-reference(s): 37			
IT	concrete additive maleic anhydride polyoxyethylene polyoxypropylene graft copolymer			
IT	Concrete			
	Concrete modifiers			
	Dispersing agents			
	(copolymer containing oxyalkylene diol alkenyl ether and unsatd. dicarboxylic acid derivs. and uses as concrete modifier)			
IT	Lime (chemical)			
	RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)			
	(copolymer containing oxyalkylene diol alkenyl ether and unsatd. dicarboxylic acid derivs. and uses as concrete modifier)			
IT	Cement			
	(portland, PC 35 Kiefersfelden; copolymer containing oxyalkylene diol alkenyl ether and unsatd. dicarboxylic acid derivs. and uses as concrete modifier)			
IT	108-31-6DP, Maleic anhydride, graft polymers 50856-25-2DP, Poly(ethylene glycol) methyl vinyl ether, graft polymers 106392-12-5DP, Ethylene oxide-propylene oxide block copolymer, propanediolamine derivative reaction products with maleic anhydride, graft polymers 106494-51-3DP, Ethylene oxide-propylene oxide block copolymer monomethyl ether, propanediolamine derivative reaction products with maleic anhydride, graft polymers 929901-36-0P 929901-38-2P 929901-40-6P 929901-42-8P 929901-44-0P 929901-46-2P 929901-48-4P 930086-28-5P 930086-30-9P 930086-32-1P 930086-34-3P 930086-38-7P 930086-40-1P 930086-42-3P			
	RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)			
	(copolymer containing oxyalkylene diol alkenyl ether and unsatd. dicarboxylic acid derivs. and uses as concrete modifier)			
IT	13397-24-5, Gypsum, properties			
	RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)			
	(copolymer containing oxyalkylene diol alkenyl ether and unsatd. dicarboxylic acid derivs. and uses as concrete modifier)			
IT	108-31-6DP, Maleic anhydride, graft polymers 50856-25-2DP, Poly(ethylene glycol) methyl vinyl ether, graft polymers 929901-44-0P 929901-48-4P			
	RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)			
	(copolymer containing oxyalkylene diol alkenyl ether and unsatd. dicarboxylic acid derivs. and uses as concrete modifier)			
RN	108-31-6 HCPLUS			
CN	2,5-Furandione (CA INDEX NAME)			



RN 50856-25-2 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -ethenyl- ω -methoxy- (CA INDEX NAME)

RN 929901-44-0 HCAPLUS

CN 2-Butenedioic acid (2Z)-, 1,4-dibutyl ester, polymer with α -ethenyl- ω -methoxypoly(oxy-1,2-ethanediyl) and 2,5-furandione, graft, sodium salt (CA INDEX NAME)

CM 1

CRN 929901-43-9

CMF (C₁₂ H₂₀ O₄)_n C₄ H₂ O₃

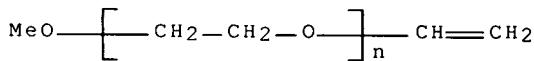
CCI PMS

CM 2

CRN 50856-25-2

CMF (C₂ H₄ O)_n C₃ H₆ O

CCI PMS



CM 3

CRN 108-31-6

CMF C₄ H₂ O₃

CM 4

CRN 105-76-0

CMF C₁₂ H₂₀ O₄

Double bond geometry as shown.



RN 929901-48-4 HCAPLUS

CN 2,5-Furandione, polymer with α -[dimethyl[3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl]silyl]- ω -[[dimethyl[3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl]silyl]oxy]poly[oxy(dimethylsilylene)] and α -ethenyl- ω -methoxypoly(oxy-1,2-ethanediyl), graft, sodium salt (CA INDEX NAME)

CM 1

CRN 929901-47-3

CMF $(\text{C}_4\text{ H}_2\text{ O}_3 \cdot (\text{C}_2\text{ H}_6\text{ O Si})_n\text{ C}_1\text{H}_3\text{4 O}_5\text{ Si}_2 \cdot (\text{C}_2\text{ H}_4\text{ O})_n\text{ C}_3\text{ H}_6\text{ O})_x$

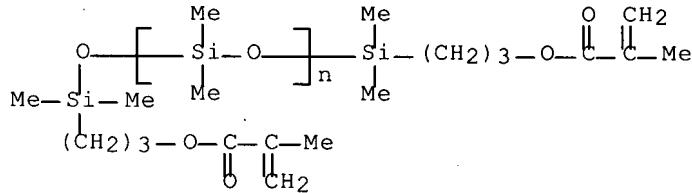
CCI PMS

CM 2

CRN 58130-03-3

CMF $(\text{C}_2\text{ H}_6\text{ O Si})_n\text{ C}_1\text{H}_3\text{4 O}_5\text{ Si}_2$

CCI PMS

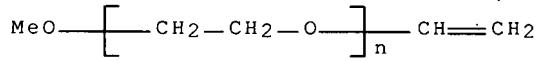


CM 3

CRN 50856-25-2

CMF $(\text{C}_2\text{ H}_4\text{ O})_n\text{ C}_3\text{ H}_6\text{ O}$

CCI PMS



CM 4

CRN 108-31-6

CMF $\text{C}_4\text{ H}_2\text{ O}_3$



L69 ANSWER 3 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2007:261802 HCAPLUS Full-text

DN 146:359636

TI Copolymers of oxyalkyleneglycol alkenyl ethers and derivatives of unsaturated dicarboxylic acids as additives for hydraulic binders

IN Eiblesitter, Gehart; Schubotz, Christian; Laitene, Hubert; Gelasio, Herard; Karn, Alfred

PA Architectural Technology Research Co., Ltd., Germany

SO Faming Zhuanli Shengqing Gongkai Shuomingshu, 27pp.

CODEN: CNXXEV

DT Patent

LA Chinese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1919887	A	20070228	CN 2005-10093558	20050826
PRAI	CN 2005-10093558		20050826		

AB The copolymer is prepared from unsatd. mono- or dicarboxylic acid derivs., oxyalkylene glycol alkenyl ethers, vinylpolyalkylene diols, polysiloxanes or ester compds. Thus, 3300 g polyethylene glycol Me vinyl ether and 58.8 g maleic anhydride were added with 33.00 g reaction product of amino-terminated ethylene oxide-propylene oxide block copolymer and maleic anhydride, 930 mg ferrous sulfate heptahydrate, 5.97 g 3-thiopropionic acid, 281.00 g acrylic acid containing 17.9 g 3-thiopropionic acid in 843 g water, 252 mL 2% sodium hydroxymethyl sulfinate, finally neutralized with sodium hydroxide to pH 6.5 to give a title copolymer.

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 58

IT Adhesives

Cement

(copolymers of oxyalkyleneglycol alkenyl ethers and derivs. of unsatd. dicarboxylic acids as additives for hydraulic binders)

IT 79-10-7DP, Acrylic acid, reaction product with maleamide-terminated ethylene oxide-propylene oxide block copolymer, maleic anhydride, polyethylene glycol Me vinyl ether, polysiloxane and styrene 79-41-4DP, Methacrylic acid, reaction product with maleamide-terminated ethylene oxide-propylene oxide block copolymer, maleic anhydride and polyethylene glycol Me vinyl ether 100-42-5DP, Styrene, reaction product with (meth)acrylates, maleamide-terminated ethylene oxide-propylene oxide block copolymer, maleic anhydride and polyethylene glycol Me vinyl ether 105-76-0DP, Maleic acid dibutyl ester, reaction product with (meth)acrylates, maleamide-terminated ethylene oxide-propylene oxide block copolymer, maleic anhydride and polyethylene glycol Me vinyl ether 108-31-6DP, Maleic anhydride, reaction product with (meth)acrylates, maleamide-terminated ethylene oxide-propylene oxide block copolymer polyethylene glycol Me vinyl ether, polysiloxane and styrene 2170-03-8DP, Itaconic anhydride, reaction product with maleamide-terminated ethylene oxide-propylene oxide block copolymer, maleic anhydride and polyethylene glycol Me vinyl ether 25322-69-4DP, Polypropylene glycol, maleamide-terminated, reaction product with (meth)acrylates, maleic anhydride and polyethylene glycol Me vinyl ether 26915-72-0DP, Polyethylene glycol monomethyl ether monomethacrylate, reaction product with maleamide-terminated ethylene oxide-propylene oxide block copolymer, maleic anhydride and polyethylene

glycol Me vinyl ether **50856-25-2DP**, Polyethylene glycol methyl vinyl ether, reaction product with (meth)acrylates, maleamide-terminated ethylene oxide-propylene oxide block copolymer, maleic anhydride, polysiloxane and styrene **58130-03-3DP**, Methacryloxypropyl-terminated polydimethylsiloxane, reaction product with (meth)acrylates, maleamide-terminated ethylene oxide-propylene oxide block copolymer, maleic anhydride and polyethylene glycol Me vinyl ether **117989-77-2DP**, maleamide-terminated, reaction product with (meth)acrylates, maleic anhydride, polyethylene glycol Me vinyl ether, polysiloxane and styrene **135374-83-3DP**, Polyethylene glycol monomethyl ether monomaleic acid ester, reaction product with (meth)acrylates, maleamide-terminated ethylene oxide-propylene oxide block copolymer, maleic anhydride and polyethylene glycol Me vinyl ether

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(copolymers of oxyalkyleneglycol alkenyl ethers and derivs. of unsatd. dicarboxylic acids as additives for hydraulic binders)

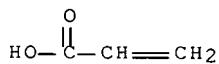
IT **79-10-7DP**, Acrylic acid, reaction product with maleamide-terminated ethylene oxide-propylene oxide block copolymer, maleic anhydride, polyethylene glycol Me vinyl ether, polysiloxane and styrene **79-41-4DP**, Methacrylic acid, reaction product with maleamide-terminated ethylene oxide-propylene oxide block copolymer, maleic anhydride and polyethylene glycol Me vinyl ether **105-76-0DP**, Maleic acid dibutyl ester, reaction product with (meth)acrylates, maleamide-terminated ethylene oxide-propylene oxide block copolymer, maleic anhydride and polyethylene glycol Me vinyl ether **108-31-6DP**, Maleic anhydride, reaction product with (meth)acrylates, maleamide-terminated ethylene oxide-propylene oxide block copolymer polyethylene glycol Me vinyl ether, polysiloxane and styrene **50856-25-2DP**, Polyethylene glycol methyl vinyl ether, reaction product with (meth)acrylates, maleamide-terminated ethylene oxide-propylene oxide block copolymer, maleic anhydride, polysiloxane and styrene

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(copolymers of oxyalkyleneglycol alkenyl ethers and derivs. of unsatd. dicarboxylic acids as additives for hydraulic binders)

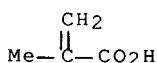
RN **79-10-7 HCPLUS**

CN 2-Propenoic acid (CA INDEX NAME)



RN **79-41-4 HCPLUS**

CN 2-Propenoic acid, 2-methyl- (CA INDEX NAME)



RN **105-76-0 HCPLUS**

CN 2-Butenedioic acid (2Z)-, 1,4-dibutyl ester (CA INDEX NAME)

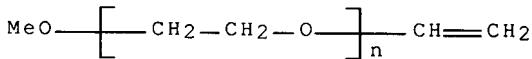
Double bond geometry as shown.



RN 108-31-6 HCAPLUS
 CN 2,5-Furandione (CA INDEX NAME)



RN 50856-25-2 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -ethenyl- ω -methoxy- (CA INDEX NAME)



L69 ANSWER 4 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 2006:1224956 HCAPLUS Full-text
 DN 146:8433
 TI Production and use of copolymers from phosphorous-containing monomers
 IN Einfeldt, Lars; Kraus, Alexander; Albrecht, Gerhard; Brandl, Martina;
 Hartl, Angelika
 PA Construction Research & Technology G.m.b.H., Germany
 SO PCT Int. Appl., 41pp.
 CODEN: PIXXD2
 DT Patent
 LA German
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2006122793	A1	20061123	WO 2006-EP4691	20060517
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
DE 102005022843	A1	20061123	DE 2005-102005022843	20050518
PRAI DE 2005-102005022843 A		20050518		
AB The title copolymers, useful as binders (e.g., for concrete) which improve flow and improve H ₂ O reduction, cyclic and/or acyclic P-containing monomers				

and unsatd. polyoxyalkylenes of specified structure. Thus, 1.2 equivalent N-(aminoethyl phosphate)maleamide was polymerized with 1.0 equivalent [4-(vinyloxy)butyl]polyethylene glycol (mol. weight 500) to give an alternating copolymer with weight-average mol. weight 11,690 and polydispersity 1.25. Use of the copolymers as binders for **concrete** is exemplified.

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 58

ST phosphorus contg monomer copolymer; aminoethyl phosphate maleimide copolymer; vinyloxybutyl polyoxyethylene copolymer; binder copolymer phosphorus contg; **concrete** binder copolymer phosphorus contg

IT **Concrete**

(copolymers from phosphorous-containing monomers as binders for **concrete**)

IT 915380-78-8P, N-(Mono(2-aminoethyl) phosphate)maleamide-polyethylene glycol mono[4-(vinyloxy)butyl] ether alternating copolymer 915380-79-9P, N-(Mono(2-aminoethyl) phosphate)maleamide-hydroxypropyl acrylate-polyethylene glycol mono[4-(vinyloxy)butyl] ether graft copolymer 915380-80-2P, N-(Mono(2-aminoethyl) phosphate)maleamide-2-hydroxyethyl methacrylate-polyethylene glycol mono[4-(vinyloxy)butyl] ether graft copolymer 915380-82-4P, N-(Mono(2-(2-aminoethoxy)ethyl) phosphate)maleamide-polyethylene glycol mono[4-(vinyloxy)butyl] ether alternating copolymer 915380-84-6P, N-(Mono(6-aminoethyl) phosphate)maleamide-polyethylene glycol mono[4-(vinyloxy)butyl] ether alternating copolymer 915380-86-8P, N-(Mono(4-aminobenzyl) phosphate)maleamide-polyethylene glycol mono[4-(vinyloxy)butyl] ether alternating copolymer 915380-88-0P, N-(Diethanolamine bis(dihydrogen phosphate))maleamide-polyethylene glycol mono[4-(vinyloxy)butyl] ether alternating copolymer 915380-89-1P, N-(Mono(2-aminoethyl) phosphate)maleamide-4-hydroxybutyl vinyl ether alternating copolymer 915380-90-4P, N-(Diethanolamine bis(dihydrogen phosphate))maleamide-4-hydroxybutyl vinyl ether alternating copolymer 915380-91-5P, N-(Mono(2-aminoethyl) phosphate)maleamide-triethylene glycol methyl vinyl ether alternating copolymer 915380-92-6P, N-(Mono(2-aminoethyl) phosphate)maleamide-maleic anhydride alternating copolymer 915380-93-7P, N-(Mono(2-aminoethyl) phosphate)maleamide-N-(2-hydroxyethyl)maleimide alternating copolymer 915380-94-8P, N-(Mono(2-aminoethyl) phosphate)maleamide-4-hydroxybutyl vinyl ether-N-(2-hydroxyethyl)maleimide copolymer

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(production and use of copolymers from phosphorous-containing monomers)

IT 915380-80-2P, N-(Mono(2-aminoethyl) phosphate)maleamide-2-hydroxyethyl methacrylate-polyethylene glycol mono[4-(vinyloxy)butyl] ether graft copolymer

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(production and use of copolymers from phosphorous-containing monomers)

RN 915380-80-2 HCPLUS

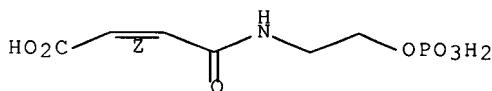
CN 2-Butenoic acid, 4-oxo-4-[[2-(phosphonoxy)ethyl]amino]-, (2Z)-, polymer with α -[4-(ethenoxy)butyl]- ω -hydroxypoly(oxy-1,2-ethanediyl) and 2-hydroxyethyl 2-methyl-2-propenoate, graft (CA INDEX NAME)

CM 1

CRN 915380-77-7

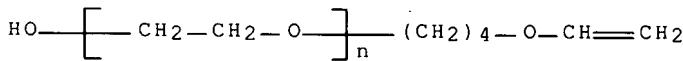
CMF C6 H10 N O7 P

Double bond geometry as shown.



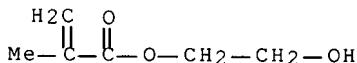
CM 2

CRN 126682-74-4
 CMF (C₂ H₄ O)_n C₆ H₁₂ O₂
 CCI PMS



CM 3

CRN 868-77-9
 CMF C₆ H₁₀ O₃



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 5 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 2006:217912 HCAPLUS Full-text
 DN 146:64215
 TI Preparation of core-shell emulsion polymers for fiberglass mesh
 AU Ju, Hong-wei; Wang, Xiao-bing; Lin, Zhong-xiang
 CS School of Chemical Engineering, Nanjing Forestry University, Nanjing, 210037, Peop. Rep. China
 SO Huaxue Yu Nianhe (2006), 28(1), 20-24
 CODEN: HYZHEN; ISSN: 1001-0017
 PB Huaxue Yu Nianhe Bianji Weiyuanhui
 DT Journal
 LA Chinese
 AB Fiberglass mesh should have properties such as softness, high strength and good alkali-resistivity as reinforced materials in **concrete**. The conventional emulsion coating for fiberglass mesh was tacky in hot circumstance and brittle in cold circumstance and also poor in strength and easy corroded. Emulsion coating having excellent properties was prepared by core-shell polymerizing and introducing an organosilicon coupler to copolymerize with shell polymer. The emulsion coating showed good softness, high blocking resistance and high strength, and the alkali - resistivity keeping rate reach 85.2% when the Tg of core polymer was (-45)°, the Tg of shell polymer was 20°, the mass ratio of shell to core was 5/4 and 3% N-hydroxymethylacrylamide and 4% organosilicon coupler based on shell monomer were introduced.
 CC 42-7 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 58

ST acrylic core shell emulsion **concrete** fiberglass mesh coating
prep

IT Coating materials
(emulsion; preparation of acrylic core-shell emulsions for fiberglass mesh
coating used as **concrete** reinforcing materials)

IT Polymerization
(graft; preparation of acrylic core-shell emulsions for fiberglass mesh
coating used as **concrete** reinforcing materials)

IT Glass transition temperature
Polymer morphology
Thermal properties
(of acrylic core-shell emulsions and effect on coating properties
fiberglass mesh used as **concrete** reinforcing materials)

IT Coating process
Concrete
(preparation of acrylic core-shell emulsions for fiberglass mesh coating
used as **concrete** reinforcing materials)

IT Glass fiber fabrics
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical
process); PROC (Process); USES (Uses)
(preparation of acrylic core-shell emulsions for fiberglass mesh coating
used as **concrete** reinforcing materials)

IT 916901-06-9P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
(core-shell; preparation of acrylic core-shell emulsions for fiberglass
mesh
coating used as **concrete** reinforcing materials)

IT 2530-85-0, KH 570
RL: MOA (Modifier or additive use); USES (Uses)
(preparation of acrylic core-shell emulsions for fiberglass mesh coating
used as **concrete** reinforcing materials)

IT 151-21-3, Sodium dodecyl sulfate, uses 153301-99-6, OP 10
RL: NUU (Other use, unclassified); USES (Uses)
(preparation of acrylic core-shell emulsions for fiberglass mesh coating
used as **concrete** reinforcing materials)

IT 916901-06-9P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
(core-shell; preparation of acrylic core-shell emulsions for fiberglass
mesh
coating used as **concrete** reinforcing materials)

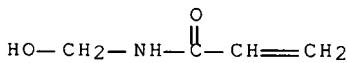
RN 916901-06-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl
2-propenoate, ethenyl acetate, ethenylbenzene, 2-ethylhexyl 2-propenoate,
N-(hydroxymethyl)-2-propenamide and 2-propenoic acid, graft (CA INDEX
NAME)

CM 1

CRN 924-42-5

CMF C4 H7 N O2



PEZZUTO

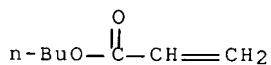
10/551268

9/18/07

16

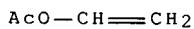
CM 2

CRN 141-32-2
CMF C7 H12 O2



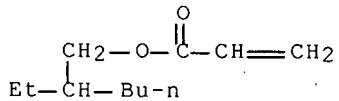
CM 3

CRN 108-05-4
CMF C4 H6 O2



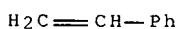
CM 4

CRN 103-11-7
CMF C11 H20 O2



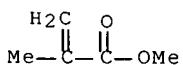
CM 5

CRN 100-42-5
CMF C8 H8

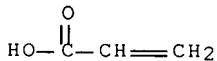


CM 6

CRN 80-62-6
CMF C5 H8 O2



CM 7

CRN 79-10-7
CMF C3 H4 O2

L69 ANSWER 6 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 2005:823748 HCAPLUS Full-text
 DN 143:230380
 TI Production and use of copolymers based on unsaturated mono- or dicarboxylic acid derivatives and oxyalkylene glycol alkenyl ethers
 IN Moraru, Bogdan; Huebsch, Christian; Albrecht, Gerhard; Scheul, Stefanie; Jetzlsperger, Eva
 PA Construction Research & Technology G.m.b.H., Germany
 SO PCT Int. Appl., 32 pp.
 CODEN: PIXXD2
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005075529	A2	20050818	WO 2005-EP1087	20050203
	WO 2005075529	A3	20061130		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, SM				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	DE 102004005434	A1	20050825	DE 2004-102004005434	20040204
	AU 2005209997	A1	20050818	AU 2005-209997	20050203
	CA 2554763	A1	20050818	CA 2005-2554763	20050203
	EP 1711544	A2	20061018	EP 2005-707171	20050203
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
	BR 2005007444	A	20070710	BR 2005-7444	20050203
	CN 1997679	A	20070711	CN 2005-80004031	20050203
	JP 2007523235	T	20070816	JP 2006-551803	20050203
	IN 2006KN02134	A	20070518	IN 2006-KN2134	20060728
	US 2007161724	A1	20070712	US 2006-588041	20060801
	KR 2007028310	A	20070312	KR 2006-715642	20060802
PRAI	DE 2004-102004005434	A	20040204		
	WO 2005-EP1087	W	20050203		

AB The title polymers, useful as additives for aqueous suspensions of inorg. or bituminous binders, are prepared from 3-4 classes of monomers of specified structure. Polymerization of an aqueous mixture of (vinyloxy)butyl polyethylene glycol (mol. weight 12,000) 310, acrylic acid 23.81, and α -Bu ω -

maleamido block polyethylene-polypropylene glycol (mol. weight 1800) 0.256 g in the presence of FeSO₄, 3-mercaptopropionic acid, Bruggolit, H₂O₂, and NaOH (pH 6.5) at 15° gave a 42.5% solution of copolymer with mol. weight 65,700. Use of the polymers with concrete is exemplified.

IC ICM C08F222-00

CC 35-3 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 58

ST polyoxyalkylene copolymer manuf; acrylic acid copolymer manuf; concrete additive copolymer aq; alkenyl ether copolymer manuf; carboxylic acid polyoxyalkylene deriv copolymer

IT Concrete

(copolymers based on unsatd. mono- or dicarboxylic acid derivs. and oxyalkylene glycol alkenyl ethers for use with binders in construction)

IT 79-10-7DP, Acrylic acid, polymers with maleamido block polyethylene-polypropylene glycol 79-41-4DP, Methacrylic acid, polymers with maleamido block polyethylene-polypropylene glycol 100-42-5DP, Styrene, polymers with maleamido block polyethylene-polypropylene glycol and acrylic compds. 2170-03-8DP, Itaconic anhydride, polymers with maleamido block polyethylene-polypropylene glycol 25584-83-2DP, Hydroxypropyl acrylate, polymers with maleamido block polyethylene-polypropylene glycol and acrylic compds. 26915-72-0DP, Polyethylene glycol methyl ether methacrylate, polymers with maleamido block polyethylene-polypropylene glycol and acrylic compds. 106392-12-5DP, Polyethylene oxide-polypropylene oxide block copolymer, maleamido Bu terminated, reaction products with acrylic compds. 862556-03-4P, Acrylic acid-dibutyl maleate-maleic anhydride-(vinyloxy)butyl polyethylene glycol copolymer 862646-93-3P, Acrylic acid-4-(vinyloxy)butyl block polyethylene-polypropylene glycol copolymer RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(production and use of copolymers based on unsatd. mono- or dicarboxylic acid derivs. and oxyalkylene glycol alkenyl ethers)

IT 862556-03-4P, Acrylic acid-dibutyl maleate-maleic anhydride-(vinyloxy)butyl polyethylene glycol copolymer RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(production and use of copolymers based on unsatd. mono- or dicarboxylic acid derivs. and oxyalkylene glycol alkenyl ethers)

RN 862556-03-4 HCAPLUS

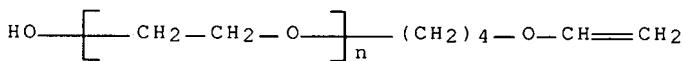
CN 2-Butenedioic acid (2Z)-, dibutyl ester, polymer with α -[4-(ethenyl)butyl]- ω -hydroxypoly(oxy-1,2-ethanediyl), 2,5-furandione and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 126682-74-4

CMF (C₂H₄O)_n C₆H₁₂O₂

CCI PMS



CM 2

CRN 108-31-6

CMF C4 H2 O3



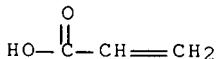
CM 3

CRN 105-76-0
CMF C12 H20 O4

Double bond geometry as shown.



CM 4

CRN 79-10-7
CMF C3 H4 O2

L69 ANSWER 7 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 2004:900966 HCAPLUS Full-text
 DN 141:383258
 TI Hardening accelerator for blowing, rapid hardening **concrete**, and
 its blowing method
 IN Nakajima, Yasuhiro; Mishima, Shunichi; Terashima, Isao; Ishida, Tsumoru
 PA Denki Kagaku Kogyo Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 12 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2004300008	A	20041028	JP 2003-98150	20030401
PRAI JP 2003-98150		20030401		
AB	The hardening accelerator for blowing contains Ca-containing liquid hardening accelerator selected from Ca(NO ₃) ₂ and/or Ca(NO ₂) ₂ , alkali thickening type polymer emulsion and optionally alkanolamine. The rapid hardening concrete contains the hardening accelerator for blowing and cement concrete . Steel frames are arranged at uncovered faces to form frame skeleton, and the rapid hardening concrete is blown to the frame skeleton to form concrete frame.			
IC	ICM C04B022-08 ICS C04B024-12; C04B028-02; E02D017-20; C04B103-12; C04B103-14			

CC 58-2 (Cement, Concrete, and Related Building Materials)
Section cross-reference(s): 38
ST calcium nitrate polymer emulsion hardening accelerator rapid hardening concrete
IT Alcohols, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(amino; hardening accelerator containing calcium nitrate or calcium nitrite and polymer emulsion for rapid hardening concrete and its blowing method)
IT Concrete
(hardening accelerator containing calcium nitrate or calcium nitrite and polymer emulsion for rapid hardening concrete and its blowing method)
IT Polymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(hardening accelerator containing calcium nitrate or calcium nitrite and polymer emulsion for rapid hardening concrete and its blowing method)
IT 12597-69-2, Steel, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(frame; hardening accelerator containing calcium nitrate or calcium nitrite and polymer emulsion for rapid hardening concrete and its blowing method)
IT 108-01-0, N,N-Dimethylethanolamine 111-42-2, Diethanolamine, uses
10124-37-5, Calcium nitrate 13780-06-8, Calcium nitrite 25119-65-7,
Maleic anhydride-methyl methacrylate copolymer 25212-88-8, Ethyl
acrylate-methacrylic acid copolymer 28061-94-1, Acrylic
acid-2-ethylhexyl acrylate-styrene-vinyl acetate copolymer 31071-53-1,
Butyl acrylate-2-ethylhexyl acrylate-methacrylic acid copolymer
68183-08-4, Diethyl maleate-ethyl acrylate-methacrylic acid copolymer
75169-81-2, Hydroxyethyl acrylate-sodium acrylate copolymer 338390-99-1,
Acrylic-acid-ethyl methacrylate-methacrylamide copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(hardening accelerator containing calcium nitrate or calcium nitrite and polymer emulsion for rapid hardening concrete and its blowing method)
IT 28061-94-1, Acrylic acid-2-ethylhexyl acrylate-styrene-vinyl
acetate copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(hardening accelerator containing calcium nitrate or calcium nitrite and polymer emulsion for rapid hardening concrete and its blowing method)
RN 28061-94-1 HCAPLUS
CN 2-Propenoic acid, polymer with ethenyl acetate, ethenylbenzene and
2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

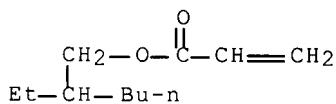
CRN 108-05-4

CMF C4 H6 O2



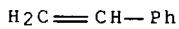
CM 2

CRN 103-11-7
 CMF C11 H20 O2



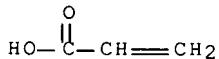
CM 3

CRN 100-42-5
 CMF C8 H8



CM 4

CRN 79-10-7
 CMF C3 H4 O2



L69 ANSWER 8 OF 59 HCPLUS COPYRIGHT 2007 ACS on STN
 AN 2004:857525 HCPLUS Full-text
 DN 141:336423
 TI Polymer-based superplasticizers for **concrete** and **cement**
 mixes
 IN Matsumoto, Toshimi; Asmus, Sven; Gerhard, Albrecht; Lorenz, Klaus; Wagner,
 Petra; Scholz, Christian
 PA Construction Research & Technology GmbH, Germany
 SO PCT Int. Appl., 29 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004087602	A1	20041014	WO 2004-EP2254	20040305
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,				

ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

JP 2004307590 A 20041104 JP 2003-100709 20030403

CA 2521173 A1 20041014 CA 2004-2521173 20040305

EP 1608601 A1 20051228 EP 2004-717590 20040305

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK

BR 2004008974 A 20060404 BR 2004-8974 20040305

US 2006247402 A1 20061102 US 2005-551268 20050929

MX 2005PA10638 A 20051215 MX 2005-PA10638 20051003

PRAI JP 2003-100709 A 20030403

WO 2004-EP2254 W 20040305

AB Title **cement** additive containing copolymers comprises (a) one or more constitutional units represented by $-\text{CH}_2\text{C}(\text{R}1)((\text{OT})\text{nS1m1S2m2OR2})-$ (formula A): wherein R1 is hydrogen, an alkyl group having 1 to 4 carbon atoms, an alkenyl group having 1 to 4 carbon atoms or an aryl group having 6 to 9 carbon atoms; R2 is hydrogen or an alkyl group having 1 to 9 carbon atoms, an alkenyl group having 1 to 9 carbon atoms or an aryl group having 6 to 9 carbon atoms; T is alkylene (including straight-chain and branched alkylene) having 1 to 4 carbon atoms or arylene having 6 to 9 carbon atoms; n is 0 or 1; S1 and S2 are, independently of one another, $-\text{O}\text{CkH2k}-$ or $-\text{OCH}_2\text{CHR3}-$, with the proviso that k is 2 or 3, R3 is an alkyl group having 1 to 9 carbon atoms, an aryl group having 6 to 9 carbon atoms; and $6 < (\text{m}_1 + \text{m}_2) < 25$; (b) one or more constitutional units represented by (meth)acrylic acid or maleic acid anhydride (formula B); and (c) one or more constitutional units represented by (meth)acrylates (formula C): (e.g., Me acrylate, hydroxyethyl acrylate, maleic acid di-Bu ester). Prescribed amts. of water and monomers for obtaining constitutional unit A were introduced into a reaction vessel equipped with a thermometer, a stirrer, a reflux condenser and two inlets. While stirring and controlling the temperature so that it normally was 30° or less, prescribed amts. of hydrogen peroxide, iron sulfate and 3-mercaptopropionic acid or similar polymerization catalysts were introduced. Monomers for obtaining constitutional unit B and monomers for obtaining constitutional unit C or a mixed solution of these monomers to which one or more monomers selected from other monomers had been added and which had been prepared in a sep. vessel at a prescribed ratio were introduced into the reaction solution at a prescribed speed. After a prescribed reaction time, an aqueous solution of caustic soda was introduced to terminate the reaction. The **cement** additive further comprising one or more of additive I selected from the group consisting of polycarboxylic acid copolymers comprising vinyl alc.

IC ICM C04B024-26

ICS C04B024-32

CC 58-3 (Cement, Concrete, and Related Building Materials)

Section cross-reference(s): 38

ST concrete modifier **cement** polymer superplasticizer

IT Cement

Concrete

Concrete modifiers

(polymer-based superplasticizers for concrete and cement mixes)

IT Acrylic polymers, preparation

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(polymer-based superplasticizers for concrete and cement mixes)

IT Plasticizers

(superplasticizers; polymer-based superplasticizers for concrete and cement mixes)

IT 79-10-7DP, Acrylic acid, reaction products with vinyl alc. derivs., maleic anhydride derivs., and acrylates 96-33-3DP, Methyl acrylate, reaction products with vinyl alc. derivs., maleic anhydride derivs., and acrylates 105-76-0DP, Maleic acid dibutyl ester, reaction products with vinyl alc. derivs., maleic anhydride derivs., and acrylates 108-31-6DP, Maleic anhydride, reaction products with vinyl alc. derivs., and acrylates 818-61-1DP, reaction products with vinyl alc. derivs., maleic anhydride derivs., and acrylates 9002-89-5DP, Polyvinyl alcohol, ether derivs., reaction products with maleic anhydride derivs., and acrylates 25584-83-2DP, Hydroxypropyl acrylate, reaction products with vinyl alc. derivs., maleic anhydride derivs., and acrylates 27813-02-1DP, Hydroxypropyl methacrylate, reaction products with vinyl alc. derivs., maleic anhydride derivs., and acrylates

RL: IMF (Industrial manufacture); MOA (Modifier or additive use)

; PREP (Preparation); USES (Uses)

(polymer-based superplasticizers for concrete and cement mixes)

IT 79-10-7DP, Acrylic acid, reaction products with vinyl alc. derivs., maleic anhydride derivs., and acrylates 96-33-3DP, Methyl acrylate, reaction products with vinyl alc. derivs., maleic anhydride derivs., and acrylates 105-76-0DP, Maleic acid dibutyl ester, reaction products with vinyl alc. derivs., maleic anhydride derivs., and acrylates 108-31-6DP, Maleic anhydride, reaction products with vinyl alc. derivs., and acrylates 818-61-1DP, reaction products with vinyl alc. derivs., maleic anhydride derivs., and acrylates 9002-89-5DP, Polyvinyl alcohol, ether derivs., reaction products with maleic anhydride derivs., and acrylates 25584-83-2DP, Hydroxypropyl acrylate, reaction products with vinyl alc. derivs., maleic anhydride derivs., and acrylates 27813-02-1DP, Hydroxypropyl methacrylate, reaction products with vinyl alc. derivs., maleic anhydride derivs., and acrylates

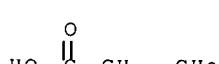
RL: IMF (Industrial manufacture); MOA (Modifier or additive use)

; PREP (Preparation); USES (Uses)

(polymer-based superplasticizers for concrete and cement mixes)

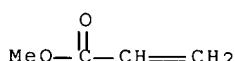
RN 79-10-7 HCPLUS

CN 2-Propenoic acid (CA INDEX NAME)



RN 96-33-3 HCPLUS

CN 2-Propenoic acid, methyl ester (CA INDEX NAME)



RN 105-76-0 HCPLUS

CN 2-Butenedioic acid (2Z)-, 1,4-dibutyl ester (CA INDEX NAME)

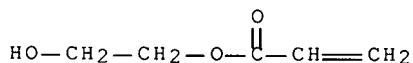
Double bond geometry as shown.



RN 108-31-6 HCAPLUS
CN 2,5-Furandione (CA INDEX NAME)



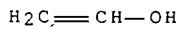
RN 818-61-1 HCAPLUS
CN 2-Propenoic acid, 2-hydroxyethyl ester (CA INDEX NAME)



RN 9002-89-5 HCAPLUS
CN Ethenol, homopolymer (CA INDEX NAME)

CM 1

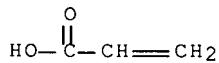
CRN 557-75-5
CMF C2 H4 O



RN 25584-83-2 HCAPLUS
CN 2-Propenoic acid, monoester with 1,2-propanediol (CA INDEX NAME)

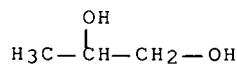
CM 1

CRN 79-10-7
CMF C3 H4 O2



CM 2

CRN 57-55-6
CMF C3 H8 O2



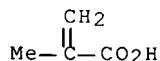
RN 27813-02-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (CA INDEX NAME)

CM 1

CRN 79-41-4

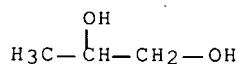
CMF C4 H6 O2



CM 2

CRN 57-55-6

CMF C3 H8 O2



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 9 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:55585 HCAPLUS Full-text

DN 140:115841

TI Graft polyoxyalkylene-based dispersants and hydraulic compositions containing them

IN Ehara, Masanobu; Kojima, Toshiharu; Yadokoro, Yoshiaki; Izumi, Tatsuo

PA Kao Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004018337	A	20040122	JP 2002-178187	20020619
	JP 2006104057	A	20060420	JP 2005-316081	20051031

PRAI JP 2002-178187 A3 20020619

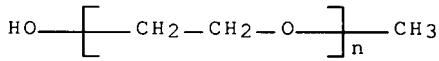
AB The dispersions contain polymers having structural repeating units $\text{CH}_2:\text{CR}_1(\text{CH}_2)^q(\text{CO})^p\text{O}(\text{AO})^n\text{R}_2$, polymers having structural repeating units $\text{CH}_2:\text{CR}_3(\text{CH}_2)^s(\text{CO})^r\text{O}(\text{AO})^m\text{R}_4$ ($\text{R}_1, \text{R}_3 = \text{H}, \text{Me}; \text{R}_2, \text{R}_4 = \text{H}, \text{C}_1-5 \text{ alkyl}; \text{AO} = \text{C}_2-4$ oxyalkylene; $m, n = 2-50$, $|m - n| \geq 2$; $p-s = 0, 1$) and hydroxycarboxylic acids or their salts. Concrete mixes show good flowability and flowability retention independently of cement types.

IC ICM C04B024-26

ICS B01F017-42; B01F017-52; C04B024-06; C04B028-02
 CC 58-2 (Cement, Concrete, and Related Building
 Materials)
 Section cross-reference(s): 38
 ST graft polyoxyalkylene hydroxycarboxylic acid dispersant concrete
 ; ethylene oxide methacrylic acid graft dispersant cement;
 sodium gluconate graft polyoxyalkylene dispersant c
 IT Concrete
 Dispersing agents
 (dispersants containing graft polyoxyalkylenes and hydroxycarboxylic acids
 for hydraulic compns. having good flowability)
 IT Cement
 (low-heat; dispersants containing graft polyoxyalkylenes and
 hydroxycarboxylic acids for hydraulic compns. having good flowability)
 IT Cement
 (portland, slag; dispersants containing graft polyoxyalkylenes and
 hydroxycarboxylic acids for hydraulic compns. having good flowability)
 IT 108-31-6DP, Maleic anhydride, graft polymer with polyethylene
 glycol alkenyl Me ether 9004-74-4DP, Polyethylene glycol methyl
 ether, alkenyl ether, graft polymer with maleic anhydride 111740-39-7P,
 Methacrylic acid-polyethylene glycol methyl ether methacrylate graft
 copolymer
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use)
 ; TEM (Technical or engineered material use); PREP (Preparation); USES
 (Uses)
 (dispersants containing graft polyoxyalkylenes and hydroxycarboxylic acids
 for hydraulic compns. having good flowability)
 IT 108-31-6DP, Maleic anhydride, graft polymer with polyethylene
 glycol alkenyl Me ether 9004-74-4DP, Polyethylene glycol methyl
 ether, alkenyl ether, graft polymer with maleic anhydride
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use)
 ; TEM (Technical or engineered material use); PREP (Preparation); USES
 (Uses)
 (dispersants containing graft polyoxyalkylenes and hydroxycarboxylic acids
 for hydraulic compns. having good flowability)
 RN 108-31-6 HCPLUS
 CN 2,5-Furandione (CA INDEX NAME)



RN 9004-74-4 HCPLUS
 CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -hydroxy- (CA INDEX NAME)



L69 ANSWER 10 OF 59 HCPLUS COPYRIGHT 2007 ACS on STN
 AN 2004:42465 HCPLUS Full-text
 DN 141:141912
 TI Compositions of waterproofing and penetration-inhibiting glue for use in
 construction and the method therefor

IN Ma, Wanlong
 PA Peop. Rep. China
 SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 11 pp.
 CODEN: CNXXEV
 DT Patent
 LA Chinese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1353160	A	20020612	CN 2000-132228	20001110
PRAI	CN 2000-132228				

AB The waterproofing and penetration-inhibiting coating consists of A and B, wherein A is composed of acrylic acid 28-40, polyurethane 3-10, mica powder 8-12, lithopone 15-25, TiO₂ 10-17, Al₂(SiO₃)₃ 8-12, di-Bu phthalate 1-5, and polyethylene glycol octylphenyl ether 1-5%; B is composed of acrylic acid 20-30, styrene 3-8, Bu methacrylate 3-8, polyvinyl alc. 40-50, vinyl acetate 10-15, tri-Bu phosphate 0.1-0.5, polyacrylate dispersant 2-5, maleic anhydride 0.5-1.5, Na castor oil sulfonate 0.2-1.0, and antiaging agent 0.01-0.03%. The method comprises coating matrix layer with A; mixing B with cement, then coating on the substrate 2-6 times.

IC ICM C09K003-18

CC 42-7 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 58

IT Cement

(in compns. of waterproofing construction glue coating)

IT 9003-01-4, Poly(acrylic acid) 726169-92-2, Acrylic acid-butyl methacrylate-maleic anhydride-styrene-vinyl acetate copolymer
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(in compns. of waterproofing construction glue coating)

IT 726169-92-2, Acrylic acid-butyl methacrylate-maleic anhydride-styrene-vinyl acetate copolymer
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(in compns. of waterproofing construction glue coating)

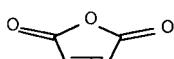
RN 726169-92-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with ethenyl acetate, ethenylbenzene, 2,5-furandione and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 108-31-6

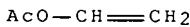
CMF C4 H2 O3



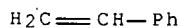
CM 2

CRN 108-05-4

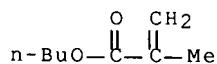
CMF C4 H6 O2



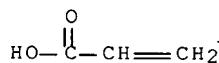
CM 3

CRN 100-42-5
CMF C8 H8

CM 4

CRN 97-88-1
CMF C8 H14 O2

CM 5

CRN 79-10-7
CMF C3 H4 O2

L69 ANSWER 11 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 2003:298858 HCAPLUS Full-text
 DN 138:291569
 TI Rapid-setting agents for spray **concretes**, rapid-setting
cement concretes, and method for their spray application
 on vertical surfaces
 IN Nakajima, Yasuhiro; Mizushima, Kazuyuki; Morioka, Minoru; Yamamoto, Kenji;
 Takahashi, Mitsuo
 PA Denki Kagaku Kogyo Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2003112956	A	20030418	JP 2001-311316	20011009
JP 3701224	B2	20050928		
PRAI JP 2001-311316		20011009		
AB	The agents contain water-soluble Group IVB, preferably Ti or Zr, element compds. and alkaline-thickening polymer emulsions. Cement concretes			

containing the agents show excellent sagging resistance and excellent strengthening properties.

IC ICM C04B024-26
 ICS C04B022-06; C04B022-08; C04B022-10; C04B022-12; C04B022-14;
 C04B028-00; E02D017-20; E02B007-06; C04B018-08; C04B014-10;
 C04B014-28; C04B018-14; C04B014-48; C04B014-42; C04B016-06;
 C04B111-00

CC 58-2 (Cement, Concrete, and Related Building Materials)

ST cement concrete rapid setting agent; Group IVB compd
 concrete rapid setting agent; alk thickening polymer emulsion
 cement additive; spray application cement
 concrete sagging prevention

IT Setting agents
 (accelerators; rapid-setting agents containing Group IVB compds. and alkali-thickening polymer emulsions for spray **concretes** and their application)

IT Group IVB element compounds
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (rapid-setting agents containing Group IVB compds. and alkali-thickening polymer emulsions for spray **concretes** and their application)

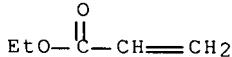
IT Concrete
 (spray application of; rapid-setting agents containing Group IVB compds. and alkali-thickening polymer emulsions for spray **concretes** and their application)

IT 7705-07-9, Titanium trichloride, uses 13825-74-6 14644-61-2, Zirconium sulfate 15823-43-5, Hafnium sulfate 25119-65-7, Maleic anhydride-methyl methacrylate copolymer 25212-88-8, Ethyl acrylate-methacrylic acid copolymer 31071-53-1, Butyl acrylate-2-ethylhexyl acrylate-methacrylic acid copolymer 54579-45-2, Acrylic acid-ethyl acrylate-2-ethylhexyl acrylate-vinyl acetate copolymer 68183-08-4, Diethyl maleate-ethyl acrylate-methacrylic acid copolymer 75169-81-2, Hydroxyethyl acrylate-sodium acrylate copolymer 338390-99-1, Acrylic acid-ethyl methacrylate-methacrylamide copolymer
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (rapid-setting agents containing Group IVB compds. and alkali-thickening polymer emulsions for spray **concretes** and their application)

IT 54579-45-2, Acrylic acid-ethyl acrylate-2-ethylhexyl acrylate-vinyl acetate copolymer
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (rapid-setting agents containing Group IVB compds. and alkali-thickening polymer emulsions for spray **concretes** and their application)

RN 54579-45-2 HCPLUS
 CN 2-Propenoic acid, polymer with ethenyl acetate, 2-ethylhexyl 2-propenoate and ethyl 2-propenoate (CA INDEX NAME)

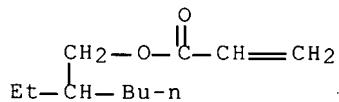
CM 1

CRN 140-88-5
 CMF C5 H8 O2

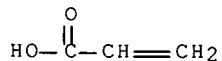
CM 2

CRN 108-05-4
CMF C4 H6 O2AcO—CH=CH₂

CM 3

CRN 103-11-7
CMF C11 H20 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

L69 ANSWER 12 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 2003:143309 HCAPLUS Full-text
 DN 138:191995
 TI Hardening accelerators for shotcretes, rapid-setting shotcretes, and
 method for shotcreting
 IN Nakajima, Yasuhiro; Mizushima, Kazuyuki; Morioka, Minoru; Yamamoto, Kenji;
 Takahashi, Mitsuo
 PA Denki Kagaku Kogyo Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
PI JP 2003055013	A	20030226	JP 2001-247149	20010816
PRAI JP 2001-247149		20010816		

AB Hardening accelerators containing soluble silicate salts and alkaline-thickening polymer emulsion are claimed. Cement concrete (i.e. cement pastes, mortar, and concrete) containing the agents and its application by mixing with

the agent by pumping are also claimed. Application of the **cement concrete** on vertically placed frames is also claimed. The shotcrete compns. have enough working life for finishing with a trowel, but can be placed without sagging.

IC ICM C04B022-08

ICS C04B024-26; C04B028-02; E02D017-20; C04B022-08; C04B018-14; C04B014-48; C04B103-14

CC 58-2 (**Cement, Concrete, and Related Building Materials**)

Section cross-reference(s): 37

IT **Concrete** modifiers

(hardening accelerator; rapid-setting shotcretes containing acrylic polymer emulsions and silicates as hardening accelerators and their application)

IT **Concrete**

Mortar

(shotcrete; rapid-setting shotcretes containing acrylic polymer emulsions and silicates as hardening accelerators and their application)

IT 25119-65-7, Maleic anhydride-methyl methacrylate copolymer 25212-88-8, Ethyl acrylate-methacrylic acid copolymer **28061-94-1**

31071-53-1, Butyl acrylate-2-ethylhexyl acrylate-methacrylic acid copolymer 68183-08-4, Diethyl maleate-ethyl acrylate-methacrylic acid copolymer 75169-81-2, Hydroxyethyl acrylate-sodium acrylate copolymer 338390-99-1

RL: **MOA (Modifier or additive use)**; TEM (Technical or engineered material use); USES (Uses)

(emulsion, hardening accelerator containing; rapid-setting shotcretes containing acrylic polymer emulsions and silicates as hardening accelerators and their application)

IT **28061-94-1**

RL: **MOA (Modifier or additive use)**; TEM (Technical or engineered material use); USES (Uses)

(emulsion, hardening accelerator containing; rapid-setting shotcretes containing acrylic polymer emulsions and silicates as hardening accelerators and their application)

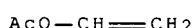
RN 28061-94-1 HCPLUS

CN 2-Propenoic acid, polymer with ethenyl acetate, ethenylbenzene and 2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 108-05-4

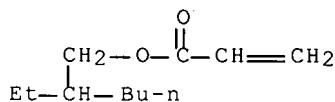
CMF C4 H6 O2



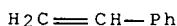
CM 2

CRN 103-11-7

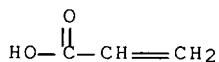
CMF C11 H20 O2



CM 3

CRN 100-42-5
CMF C8 H8

CM 4

CRN 79-10-7
CMF C3 H4 O2

L69 ANSWER 13 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 2002:900604 HCAPLUS Full-text
 DN 137:388234
 TI Hardening accelerator for blowing, rapid hardening **cement concrete**, and its blowing method
 IN Nakajima, Yasuhiro; Mizushima, Kazuyuki; Morioka, Minoru; Yamamoto, Kenji; Takahashi, Mitsuo; Teramura, Satoru
 PA Denki Kagaku Kogyo Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002338316	A	20021127	JP 2001-214966	20010716
PRAI JP 2001-64509	A	20010308		

AB A hardening accelerator for blowing contains a rapid hardening material, an acrylic acid ester copolymer emulsion, and optionally water, a water-reducing agent, inorg. powder, and fibers. The rapid hardening material is preferably Al sulfate. The hardening accelerator is transported by pumping, mixed with **cement concrete**, and blown to steel frames. Sagging and falling of the **cement concrete** after blowing are prevented.
 IC ICM C04B024-26
 ICS C04B022-14; C04B028-02; E02D017-20; C04B111-70
 CC 58-2 (**Cement, Concrete, and Related Building Materials**)
 ST aluminum sulfate acrylic acid ester copolymer hardening accelerator

concrete

IT Setting agents
(accelerators; hardening accelerator containing aluminum sulfate and acrylic acid ester copolymer emulsion for blowing **cement concrete** and its blowing method)

IT Polyolefin fibers
RL: TEM (Technical or engineered material use); USES (Uses)
(ethylene; hardening accelerator containing aluminum sulfate and acrylic acid ester copolymer emulsion for blowing **cement concrete** and its blowing method)

IT Ashes (residues)
(fly; hardening accelerator containing aluminum sulfate and acrylic acid ester copolymer emulsion for blowing **cement concrete** and its blowing method)

IT Concrete
(hardening accelerator containing aluminum sulfate and acrylic acid ester copolymer emulsion for blowing **cement concrete** and its blowing method)

IT Bentonite, uses
Fibers
Vinal fibers
RL: TEM (Technical or engineered material use); USES (Uses)
(hardening accelerator containing aluminum sulfate and acrylic acid ester copolymer emulsion for blowing **cement concrete** and its blowing method)

IT Limestone, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(powder; hardening accelerator containing aluminum sulfate and acrylic acid ester copolymer emulsion for blowing **cement concrete** and its blowing method)

IT Metallic fibers
RL: TEM (Technical or engineered material use); USES (Uses)
(steel; hardening accelerator containing aluminum sulfate and acrylic acid ester copolymer emulsion for blowing **cement concrete** and its blowing method)

IT Concrete modifiers
(water-reducing agents; hardening accelerator containing aluminum sulfate and acrylic acid ester copolymer emulsion for blowing **cement concrete** and its blowing method)

IT 7631-86-9, Silica, uses 10043-01-3, Aluminum sulfate 25212-88-8, Ethyl acrylate-methacrylic acid copolymer 27155-33-5, Maleic acid-methyl methacrylate copolymer **28061-94-1** 29354-65-2 31071-53-1
75169-81-2, Hydroxyethyl acrylate-sodium acrylate copolymer 476302-00-8
RL: TEM (Technical or engineered material use); USES (Uses)
(hardening accelerator containing aluminum sulfate and acrylic acid ester copolymer emulsion for blowing **cement concrete** and its blowing method)

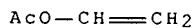
IT **28061-94-1**
RL: TEM (Technical or engineered material use); USES (Uses)
(hardening accelerator containing aluminum sulfate and acrylic acid ester copolymer emulsion for blowing **cement concrete** and its blowing method)

RN 28061-94-1 HCAPLUS

CN 2-Propenoic acid, polymer with ethenyl acetate, ethenylbenzene and 2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

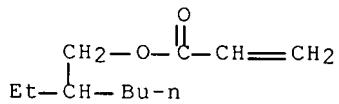
CM 1

CRN 108-05-4
CMF C4 H6 O2



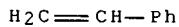
CM 2

CRN 103-11-7
 CMF C11 H20 O2



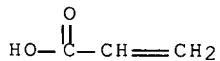
CM 3

CRN 100-42-5
 CMF C8 H8



CM 4

CRN 79-10-7
 CMF C3 H4 O2



L69 ANSWER 14 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 2002:847628 HCAPLUS Full-text
 DN 137:328504
 TI Method for spraying **concrete** mixture on slope with polymer
 thickening agent
 IN Nakajima, Yasuhiro; Mizushima, Kazuyuki; Morioka, Minoru; Yamamoto, Kenji;
 Takahashi, Mitsuo
 PA Denki Kagaku Kogyo Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1
 PATENT NO. KIND DATE APPLICATION NO. DATE
 ----- ----- ----- ----- -----

PI JP 2002321960 A 20021108 JP 2001-129162 20010426
PRAI JP 2001-129162 20010426

AB The title process comprises spraying a **cement concrete** mixture and an alkali-thickening-type polymer emulsion. Also claimed process comprises pumping the above polymer emulsion and then mixing with the **concrete** mixture for spraying on a slope. The emulsion may be obtained by polymerizing an unsatd. carboxylic acid with an ethylenic unsatd. compound. The resulting slope has good appearance.

IC ICM C04B028-02

ICS C04B024-26; E02D017-20

CC 58-2 (**Cement, Concrete, and Related Building Materials**)

ST alkali thickening polymer emulsion **cement concrete** spraying

IT **Concrete**

Spraying

Thickening agents

(spraying of **concrete** mixture on slope with alkali-thickening-type polymer emulsion)

IT 25119-65-7P, Maleic anhydride-methyl methacrylate copolymer 25212-88-8P, Ethyl acrylate-methacrylic acid copolymer 28803-94-3P

31071-53-1P, Butyl acrylate-2-ethylhexyl acrylate-methacrylic acid copolymer 68183-08-4P, Diethyl maleate-ethyl acrylate-methacrylic acid copolymer 75169-81-2P, Hydroxyethyl acrylate-sodium acrylate copolymer 338390-99-1P

RL: **MOA (Modifier or additive use)**; PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(spraying of **concrete** mixture on slope with alkali-thickening-type polymer emulsion)

IT 28803-94-3P

RL: **MOA (Modifier or additive use)**; PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(spraying of **concrete** mixture on slope with alkali-thickening-type polymer emulsion)

RN 28803-94-3 HCPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenyl acetate, ethenylbenzene and 2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 108-05-4

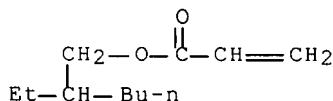
CMF C4 H6 O2



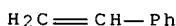
CM 2

CRN 103-11-7

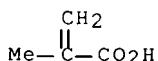
CMF C11 H20 O2



CM 3

CRN 100-42-5
CMF C8 H8

CM 4

CRN 79-41-4
CMF C4 H6 O2L69 ANSWER 15 OF 59 HCPLUS COPYRIGHT 2007 ACS on STN
AN 2002:464086 HCPLUS Full-text

DN 137:36706

TI Water-reducing agents for **cement**, and **cement** mix
compositions

IN Matsui, Tatsuya; Ito, Akinori; Yoshimatsu, Eijiro

PA NOF Corporation, Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
--	------------	------	------	-----------------	------

PI JP 2002173351 A 20020621 JP 2000-369102 20001204

PRAI JP 2000-369102 20001204

AB The water-reducing agents, for **cement** mix compns., contain copolymers which contain unsatd. carboxylic acid (derivs.) comonomers $\text{CH}_2:\text{CR}_1\text{R}_2$ ($\text{R}_1 = \text{H, Me}$; $\text{R}_2 = \text{XOCOR}_3$; $\text{X} = \text{single bond or methylene}$; $\text{R}_3 = \text{C}_1\text{-5 hydrocarbyl}$) and have polyoxyalkylene side chains. The copolymers may further contain polyoxyalkylene comonomers $\text{R}_4\text{AO}(\text{AO})_n\text{R}_5$ ($\text{R}_4 = \text{C}_2\text{-5 alkenyl}$; $\text{R}_5 = \text{H, C}_1\text{-8 hydrocarbyl}$; $\text{AO} = \text{C}_2\text{-4 oxyalkylene}$ whose ≥ 50 mol.% is occupied by oxyethylene; $n = 1\text{-}300$), and maleic acid (derivs.) comonomers at a prescribed mol. ratio. The **cement** mix compns. show high fluidity especially at low temperature and low slump loss, and give high-strength **cement**.

IC ICM C04B024-26

ICS C04B024-26; C04B024-04; C04B024-32; C08F218-04; C08F222-00;
C08F290-06; C04B103-30

CC 58-2 (Cement, Concrete, and Related Building Materials)
 Section cross-reference(s): 38

ST cement water reducing agent unsatd carboxylic acid copolymer; polyoxyalkylenel alkenyl ether copolymer cement water reducing agent; maleic acid copolymer cement water reducing agent

IT Cement

Concrete
 (water-reducing agents for cement mix compns.)

IT Concrete modifiers
 (water-reducing agents; water-reducing agents for cement mix compns.)

IT 108065-75-4P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (water-reducing agents for cement mix compns.)

IT 334918-43-3P 437611-19-3P 437611-21-7P 437611-23-9P 437611-24-0P
437615-76-4P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (water-reducing agents for cement mix compns.)

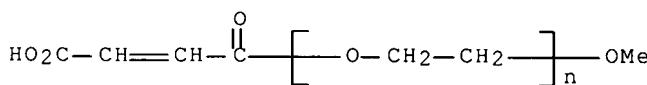
IT **437615-76-4P**
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (water-reducing agents for cement mix compns.)

RN 437615-76-4 HCPLUS.

CN Acetic acid ethenyl ester, polymer with α -[(2Z)-3-carboxy-1-oxo-2-propenyl]- ω -methoxypoly(oxy-1,2-ethanediyl) and α -methyl- ω -(2-propenyl)poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

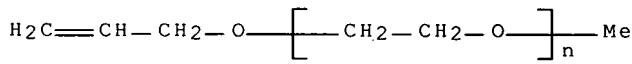
CM 1

CRN 31833-82-6
 CMF (C₂ H₄ O)_n C₅ H₆ O₄
 CCI PMS



CM 2

CRN 27252-80-8
 CMF (C₂ H₄ O)_n C₄ H₈ O
 CCI PMS



CM 3

CRN 108-05-4
 CMF C4 H6 O2



L69 ANSWER 16 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 2002:462402 HCAPLUS Full-text
 DN 137:51095
 TI The use of polycarboxylate-based flowing agents for anhydrite-based flowing lines
 IN Holland, Uwe; Friedrich, Stefan; Plank, Johann; Prosiegel, Klaus;
 Schuhbeck, Thomas
 PA SKW Polymers GmbH, Germany
 SO Ger. Offen., 14 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10063291	A1	20020620	DE 2000-10063291	20001219
	WO 2002049983	A1	20020627	WO 2001-EP14897	20011217
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002031716	A5	20020701	AU 2002-31716	20011217
PRAI	DE 2000-10063291	A	20001219		
	WO 2001-EP14897	W	20011217		

AB The use of polycarboxylate-based flowing agents is described. The flowing agents contain water-soluble copolymers for anhydrite-based flowing lines. The advantages of the used eluent include: the good flowing and process characteristics of the correspondingly manufactured anhydrite-based flowing lines and the fact that with very small dosage a long lasting workability can be attained.

IC ICM C04B024-26
 ICS C08F220-18; C08F222-04; C08F222-10; C08F222-38; C08F220-54;
 C08F226-10; C08F230-02

CC 58-6 (**Cement, Concrete, and Related Building Materials**)

ST superplasticizer mortar **cement** gypsum workability

IT **Cement**

Mortar

(use of polycarboxylate-based flowing agents for anhydrite-based flowing lines)

IT 438244-47-4, Ethylene glycol monovinyl ether-maleic anhydride-polyethylene glycol methyl ether maleate copolymer

RL: **MOA (Modifier or additive use)**; USES (Uses)

(superplasticizer; use of polycarboxylate-based flowing agents for anhydrite-based flowing lines)

IT 438244-47-4, Ethylene glycol monovinyl ether-maleic anhydride-polyethylene glycol methyl ether maleate copolymer
 RL: MOA (Modifier or additive use); USES (Uses)
 (superplasticizer; use of polycarboxylate-based flowing agents for anhydrite-based flowing lines)

RN 438244-47-4 HCPLUS

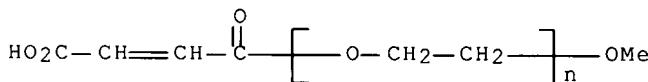
CN 2,5-Furandione, polymer with α -[(2Z)-3-carboxy-1-oxo-2-propenyl]- ω -methoxypoly(oxy-1,2-ethanediyl) and 2-(ethenyl)ethanol (9CI)
 (CA INDEX NAME)

CM 1

CRN 31833-82-6

CMF (C₂ H₄ O)_n C₅ H₆ O₄

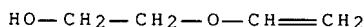
CCI PMS



CM 2

CRN 764-48-7

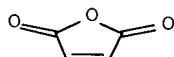
CMF C₄ H₈ O₂



CM 3

CRN 108-31-6

CMF C₄ H₂ O₃



L69 ANSWER 17 OF 59 HCPLUS COPYRIGHT 2007 ACS on STN

AN 2002:228596 HCPLUS Full-text

DN 136:264594

TI Coatings having aqueous resin layers

IN Kawai, Isao; Fujii, Masato

PA Dainippon Ink and Chemicals, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

KATHLEEN FULLER EIC1700

571/272-2505

PI JP 2002086627 A 20020326 JP 2000-285120 20000920

PRAI JP 2000-285120 20000920

AB Coatings comprise an aqueous resin layer and a toplayer having Shore D hardness >50. Thus, **concrete** was coated with a composition containing a 50% aqueous emulsion of acrylic acid- β -methacryloyloxyethyltrimethylsilyl e-Me methacrylate-Veova 10 copolymer ammonium salt 100, Nopco 8034L 0.2, and CaCO₃ 100 parts and topcoated with PF 570E570.

IC ICM B32B027-08

ICS B32B027-40

CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 58

ST **concrete** vinyl polymer undercoating

IT Polyurethanes, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(acrylic; coatings having aqueous resin layers on **concrete**)

IT **Concrete**
Emulsions
(coatings having aqueous resin layers on **concrete**)

IT Vinyl compounds, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polymers; coatings having aqueous resin layers on **concrete**)

IT Acrylic polymers, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(polyurethane-; coatings having aqueous resin layers on **concrete**)

IT Coating materials
(topcoats; coatings having aqueous resin layers on **concrete**)

IT Coating materials
(undercoatings; coatings having aqueous resin layers on **concrete**)

IT 40481-53-6P, Acrylic acid-2-ethylhexyl acrylate-vinyl acetate copolymer ammonium salt 404888-84-2P 404888-87-5P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(coatings having aqueous resin layers on **concrete**)

IT 194429-23-7, Voncoat CG 5030 250228-31-0, Vondic 2210
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(coatings having aqueous resin layers on **concrete**)

IT 214619-56-4, HF 3000 396659-85-1, PF 570E570
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(coatings having aqueous resin layers on **concrete**)

IT 40481-53-6P, Acrylic acid-2-ethylhexyl acrylate-vinyl acetate copolymer ammonium salt 404888-84-2P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(coatings having aqueous resin layers on **concrete**)

RN 40481-53-6 HCPLUS

CN 2-Propenoic acid, polymer with ethenyl acetate and 2-ethylhexyl 2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 26634-78-6

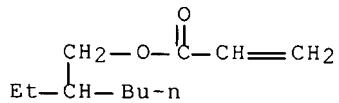
CMF (C11 H20 O2 . C4 H6 O2 . C3 H4 O2)x

CCI PMS

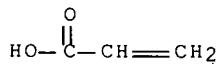
CM 2

CRN 108-05-4
CMF C4 H6 O2AcO—CH=CH₂

CM 3

CRN 103-11-7
CMF C11 H20 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

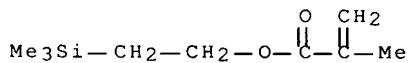
RN 404888-84-2 HCPLUS

CN tert-Decanoic acid, ethenyl ester, polymer with methyl
2-methyl-2-propenoate, 2-propenoic acid and 2-(trimethylsilyl)ethyl
2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

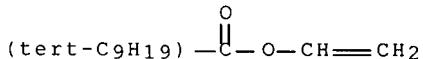
CRN 404888-83-1
CMF (C₁₂ H₂₂ O₂ . C₉ H₁₈ O₂ Si . C₅ H₈ O₂ . C₃ H₄ O₂)_x
CCI PMS

CM 2

CRN 95049-21-1
CMF C₉ H₁₈ O₂ Si

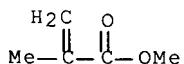
CM 3

CRN 26544-09-2
 CMF C12 H22 O2
 CCI IDS



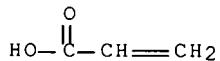
CM 4

CRN 80-62-6
 CMF C5 H8 O2



CM 5

CRN 79-10-7
 CMF C3 H4 O2



L69 ANSWER 18 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 2001:608765 HCAPLUS Full-text
 DN 136:185432
 TI Neo vinyl ester latexes for wood, metal and **concrete** coating applications
 AU Yang, H. W.; Smith, J. L.; Hester, J. R.; Li, J.; Smith, O. W.; Thames, S. F.
 CS ExxonMobil Chemical Company, Baytown, TX, 77520, USA
 SO Proceedings of the International Waterborne, High-Solids, and Powder Coatings Symposium (2001), 28th, 61-76
 CODEN: PIWCF4
 PB University of Southern Mississippi, Dep. of Polymer Science
 DT Journal
 LA English
 AB Neo vinyl esters (VE) can be copolymerd. with vinyl acetate (VA) and acrylic monomers in various combinations to provide improved coating performance. The improved performance is primarily due to the steric structure and hydrophobic character of the VE monomers. For interior coatings, VE/VA copolymers provide excellent scrub, water and stain resistance. Exterior coatings over **concrete**, wood, and metal substrates based on VE/VA or VE/Acrylic copolymers offer excellent weathering, water and corrosion resistance.
 CC 42-13 (Coatings, Inks, and Related Products)

Section cross-reference(s): 58

ST neo vinyl ester latex wood metal **concrete** coating

IT Coating materials
(anticorrosive; neo vinyl ester latexes for wood, metal and **concrete** coating applications)

IT Coating materials
(latex; neo vinyl ester latexes for wood, metal and **concrete** coating applications)

IT **Concrete**
Luster
Paints
Storage modulus
Wood
(neo vinyl ester latexes for wood, metal and **concrete** coating applications)

IT Water vapor
(transmission of; neo vinyl ester latexes for wood, metal and **concrete** coating applications)

IT 12597-69-2, Steel, uses
RL: NUU (Other use, unclassified); USES (Uses)
(cold-roll, substrate; neo vinyl ester latexes for wood, metal and **concrete** coating applications)

IT 239091-10-2, Butyl acrylate-Exxar Neo 12-vinyl acetate copolymer
239091-10-2D, hydrolyzed 239091-12-4, Exxar Neo 12-vinyl acetate copolymer 239091-13-5, Acrylic acidbutyl acrylate-Exxar Neo 12-methyl methacrylate copolymer
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(neo vinyl ester latexes for wood, metal and **concrete** coating applications)

IT 9002-86-2, PVC
RL: TEM (Technical or engineered material use); USES (Uses)
(paint formulations; neo vinyl ester latexes for wood, metal and **concrete** coating applications)

IT 239091-13-5, Acrylic acidbutyl acrylate-Exxar Neo 12-methyl methacrylate copolymer
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(neo vinyl ester latexes for wood, metal and **concrete** coating applications)

RN 239091-13-5 HCPLUS

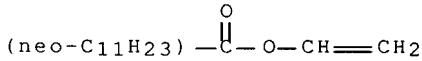
CN Neododecanoic acid, ethenyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 122615-61-6

CMF C14 H26 O2

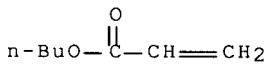
CCI IDS



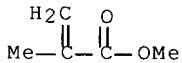
CM 2

CRN 141-32-2

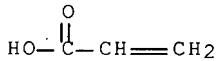
CMF C7 H12 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 19 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 2001:36840 HCAPLUS Full-text
 DN 134:104820
 TI Liquid cement dispersant for inhibiting drying shrinkage of concrete
 IN Sugiyama, Tomomi; Matsuo, Shigeharu; Ishimori, Masaki; Hayashi, Hiroshi
 PA NMB K. K., Japan; Taiheiyo Cement Co., Ltd.
 SO Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2001010853	A	20010116	JP 1999-179562	19990625
PRAI JP 1999-179562		19990625		
AB	The title dispersant contains (1) a graft polymer having carboxylic acids or their salts as side chains, part of which are connected to ≥ 1 of compound having shrinkage-inhibiting properties and (2) ≥ 1 of water-reducing compound or ≥ 1 of shrinkage-inhibiting compound Preferably, the shrinkage-inhibiting compound is selected from oligoalkylene glycols and/or polyalcs. The dispersant has high storage stability, and concrete obtained by using the agent shows low air-entering.			
IC	ICM C04B024-26			

ICS C04B024-26; C04B024-02; C04B103-40; C04B103-60

CC 58-2 (**Cement**, **Concrete**, and Related Building Materials)
Section cross-reference(s): 38

ST **cement** dispersant graft polycarboxylic acid shrinkage inhibitor; oligoalkylene glycol drying shrinkage inhibitor **cement** dispersant; polyalc shrinkage drying inhibitor **cement** dispersant; storage stability **cement** dispersant drying shrinkage inhibitor; water reducing agent shrinkage inhibitor **concrete** modifier

IT Polyoxalkylenes, properties
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(acrylic, graft; liquid **cement** dispersant comprising modifier and polycarboxylic graft polymer connected to shrinkage-inhibiting compound)

IT **Concrete**
Dispersing agents
(liquid **cement** dispersant comprising modifier and polycarboxylic graft polymer connected to shrinkage-inhibiting compound)

IT Glycols, properties
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(oligo, monoalkyl ether, shrinkage-inhibiting compound; liquid **cement** dispersant comprising modifier and polycarboxylic graft polymer connected to shrinkage-inhibiting compound)

IT Ethers, properties
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(pentenyl, polymers with maleic anhydride; liquid **cement** dispersant comprising modifier and polycarboxylic graft polymer connected to shrinkage-inhibiting compound)

IT Carboxylic acids, properties
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(polycarboxylic, salts, water-reducing agent; liquid **cement** dispersant comprising modifier and polycarboxylic graft polymer connected to shrinkage-inhibiting compound)

IT Polyoxalkylenes, properties
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(polymers with carboxy-containing unsatd. monomers, graft; liquid **cement** dispersant comprising modifier and polycarboxylic graft polymer connected to shrinkage-inhibiting compound)

IT **Concrete** modifiers
(shrinkage-inhibiting agent; liquid **cement** dispersant comprising modifier and polycarboxylic graft polymer connected to shrinkage-inhibiting compound)

IT **Concrete** modifiers
(water-reducing agents; liquid **cement** dispersant comprising modifier and polycarboxylic graft polymer connected to shrinkage-inhibiting compound)

IT 79-41-4D, Methacrylic acid, derivs., graft polymers with polyalkylene glycols 100-42-5D, Styrene, polymers with carboxy-containing unsatd. monomers and polyalkylene glycols, graft 107-18-6D, Allyl alcohol, polymers with carboxy-containing unsatd. monomers and polyalkylene glycols, graft 108-31-6D, Maleic anhydride, polymers with carboxy-containing unsatd. monomers and polyalkylene glycols, graft 9004-74-4D, Polyethylene glycol monomethyl ether, polymers with carboxy-containing unsatd. monomers, polyalkylene glycols, and unsatd.

monomers, graft 319482-60-5D, GE 42-2P, polymers with carboxy-containing unsatd. monomers, polyalkylene glycols, and unsatd. monomers, graft RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(liquid **cement** dispersant comprising modifier and polycarboxylic graft polymer connected to shrinkage-inhibiting compound)

IT 187112-08-9, Tetra Guard AS 21

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(shrinkage-inhibiting agent; liquid **cement** dispersant comprising modifier and polycarboxylic graft polymer connected to shrinkage-inhibiting compound)

IT 115-77-5, Pentaerythritol, properties 126-30-7, Neopentyl glycol 1115-20-4, Neopentyl glycol hydroxypivalate monoester 26762-52-7, Hexanediol 29348-79-6, Pentanediol

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(shrinkage-inhibiting compound; liquid **cement** dispersant comprising modifier and polycarboxylic graft polymer connected to shrinkage-inhibiting compound)

IT 140229-20-5, Rheobuild SP 8N

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(water-reducing agent; liquid **cement** dispersant comprising modifier and polycarboxylic graft polymer connected to shrinkage-inhibiting compound)

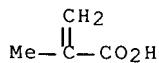
IT 79-41-4D, Methacrylic acid, derivs., graft polymers with polyalkylene glycols 108-31-6D, Maleic anhydride, polymers with carboxy-containing unsatd. monomers and polyalkylene glycols, graft 9004-74-4D, Polyethylene glycol monomethyl ether, polymers with carboxy-containing unsatd. monomers, polyalkylene glycols, and unsatd. monomers, graft

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(liquid **cement** dispersant comprising modifier and polycarboxylic graft polymer connected to shrinkage-inhibiting compound)

RN 79-41-4 HCPLUS

CN 2-Propenoic acid, 2-methyl- (CA INDEX NAME)



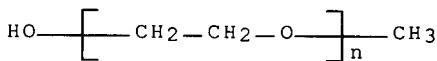
RN 108-31-6 HCPLUS

CN 2,5-Furandione (CA INDEX NAME)



RN 9004-74-4 HCPLUS

CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -hydroxy- (CA INDEX NAME)



L69 ANSWER 20 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 2000:819130 HCAPLUS Full-text
 DN 134:8309
 TI **Cement** additives for reducing air entraining and improving fluidity
 IN Yuasa, Tsutomu; Nagare, Koichiro; Kawakami, Hirokatsu; Hirata, Takeshi
 PA Nippon Shokubai Kagaku Kogyo Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 20 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2000319054	A	20001121	JP 1999-303803	19991026
PRAI JP 1999-61329	A	19990309		

AB The **cement** additives contain copolymers prepared by polymerizing monomer mixts. containing polyalkylene glycol ester monomer $\text{CH}_2 = \text{C}(\text{R}1)\text{COO}(\text{R}2\text{O})_n\text{R}3$ ($\text{R}2 = \text{H}$ or Me , $\text{R}2\text{O} = \geq 1$ C₂-18 oxyalkylene groups, $\text{R}3 = \text{C}1\text{-}30$ hydrocarbon, $n = 2\text{-}300$) 0.01-4, polyalkylene glycol ester monomer $\text{CH}_2 = \text{C}(\text{R}4)\text{COO}(\text{R}5\text{O})_m\text{R}5$ ($\text{R}4 = \text{H}$ or Me , $\text{R}5\text{O} = \geq 1$ C₂-18 oxyalkylene, $\text{R}6 = \text{C}1\text{-}30$ hydrocarbon, $m = 2\text{-}300$) 5-96.99, carboxylic acid monomer $\text{CH}_2 = \text{C}(\text{R}7)\text{COOM}$ ($\text{R}7 = \text{H}$ or Me , $\text{M} = \text{H}$, monovalent metal, divalent metal, or organic amine) 3-94.9, and other comonomer 0-50 weight%.

IC ICM C04B024-26
 ICS C04B024-26; C08F220-06; C08F220-26; C08F290-06; C04B103-30;
 C04B103-32

CC 58-2 (**Cement**, **Concrete**, and Related Building Materials)

Section cross-reference(s): 38
 ST polymeric **cement** additive fluidity improvement; air entraining
 redn polymeric **cement** additive

IT **Cement** (construction material)

Concrete

Mortar

(polymeric **cement** additives for reducing air entraining and improving fluidity)

IT 296776-20-0, Methacrylic acid-methoxypolyethylene glycol monomethacrylate-nonyloxypropylene polyethylene glycol monomethacrylate copolymer 296776-24-4, Heptadecanoxypropylene glycol polyethylene glycol monomethacrylate-methacrylic acid-methoxypolyethylene glycol monomethacrylate-methyl methacrylate copolymer 296776-27-7, Ethyl-vinyl ether-heptadecanoxypropylene glycol polyethylene glycol monomethacrylate-methacrylic acid-methoxypolyethylene glycol monomethacrylate copolymer 296776-30-2, Heptadecanoxypropylene glycol polyethylene glycol monomethacrylate-methacrylic acid-methoxypolyethylene glycol monomethacrylate-styrene copolymer 296776-33-5, Heptadecanoxypropylene glycol polyethylene glycol monomethacrylate-methacrylic acid-methoxypolyethylene glycol monomethacrylate copolymer 308140-99-0 308239-00-1, Methacrylic acid-methoxypolyethylene glycol monomethacrylate-methoxypolypropylene polyethylene glycol monomethacrylate copolymer

RL: TEM (Technical or engineered material use); USES (Uses)

(polymeric **cement** additives for reducing air entraining and improving fluidity)

IT 296776-27-7, Ethyl-vinyl ether-heptadecanoxypolypropylene glycol polyethylene glycol monomethacrylate-methacrylic acid-methoxypolyethylene glycol monomethacrylate copolymer

RL: TEM (Technical or engineered material use); USES (Uses)
(polymeric **cement** additives for reducing air entraining and improving fluidity)

RN 296776-27-7 HCPLUS

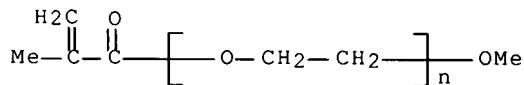
CN 2-Propenoic acid, 2-methyl-, polymer with ethoxyethene, methyloxirane polymer with oxirane mono(2-methyl-2-propenoate) heptadecyl ether, and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C₂ H₄ O)_n C₅ H₈ O₂

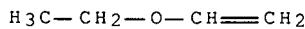
CCI PMS



CM 2

CRN 109-92-2

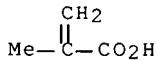
CMF C₄ H₈ O



CM 3

CRN 79-41-4

CMF C₄ H₆ O₂



CM 4

CRN 296776-23-3

CMF C₁₇ H₃₆ O . C₄ H₆ O₂ . (C₃ H₆ O . C₂ H₄ O)x

CM 5

CRN 1454-85-9

PEZZUTO

10/551268

9/18/07

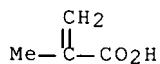
49

CMF C17 H36 O

Me—(CH₂)₁₆—OH

CM 6

CRN 79-41-4
CMF C4 H6 O₂

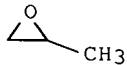


CM 7

CRN 9003-11-6
CMF (C₃ H₆ O . C₂ H₄ O)x
CCI PMS

CM 8

CRN 75-56-9
CMF C₃ H₆ O



CM 9

CRN 75-21-8
CMF C₂ H₄ O



L69 ANSWER 21 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:790437 HCAPLUS Full-text

DN 133:354099

TI Acrylic copolymer agents based on urethane for improving the workability of hydraulic binders, and their preparation

IN Kensicher, Yves; Suau, Jean-Marc

PA Coatex S.A., Fr.

SO PCT Int. Appl., 43 pp.

KATHLEEN FULLER EIC1700

571/272-2505

CODEN: PIXXD2

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000066511	A1	20001109	WO 2000-FR1081	20000425
	W: AU, BA, BG, BR, CA, CN, CZ, HR, HU, ID, IN, JP, KR, MX, NO, NZ, PL, RO, RU, SI, SK, TR, US, YU				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	FR 2792932	A1	20001103	FR 1999-5665	19990430
	FR 2792932	B1	20010706		
	TW 574166	B	20040201	TW 2000-89107133	20000417
	CA 2372479	A1	20001109	CA 2000-2372479	20000425
	EP 1194390	A1	20020410	EP 2000-922732	20000425
	EP 1194390	B1	20040303		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO				
	AT 260875	T	20040315	AT 2000-922732	20000425
	US 6660799	B1	20031209	US 2002-959568	20020129
	US 2004030007	A1	20040212	US 2003-636673	20030808
	US 7064161	B2	20060620		
	US 2006020059	A1	20060126	US 2005-198279	20050808
PRAI	FR 1999-5665	A	19990430		
	WO 2000-FR1081	W	20000425		
	US 2002-959568	A1	20020129		
	US 2003-636673	A1	20030808		

AB Workability agents for hydraulic binders consist of copolymers obtained by radical copolymer of ethylenic alkoxy polyethylene glycol urethanes, anionic monomers, nonionic monomers, and optionally alkoxy polyethylene glycol acrylates. The workability agents are capable of modifying the rheol. characteristics of mortars, **concrete** and other **cement**-based compns. Workability may be defined as the property of a hydraulic binder to remain workable for as long as possible. The invention concerns novel agents of the acrylic copolymer type with urethane functions to improve the workability of hydraulic binders, their preparation method, binders containing them and their use. The agents have the property of not delaying setting time. An agent was prepared from a urethane acrylate monomer (from methoxy polyethylene glycol, TDI, and ethylene glycol monoacrylate), acrylamide, ethylene glycol methacrylate phosphate, and Et acrylate.

IC ICM C04B024-32

ICS C04B024-28; C04B024-26

CC 58-1 (**Cement**, **Concrete**, and Related Building Materials)

Section cross-reference(s): 37

IT **Cement** (construction material)

(acrylic copolymer agents based on urethane for improving the workability of hydraulic binders, and their preparation)

IT 79-06-1DP, Acrylamide, polymers with urethane acrylates 79-41-4DP, Methacrylic acid, polymers with urethane acrylates 140-88-5DP, Ethyl acrylate, polymers with urethane acrylates 306283-32-9P 306283-35-2P 306283-37-4P 306284-19-5P 306284-20-8P 306284-21-9P 306284-22-0P 306284-23-1P 306284-24-2P 306284-26-4P 306284-28-6P 306284-30-0P 306284-32-2P 306284-34-4P 306284-36-6P 306284-38-8P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(acrylic copolymer agents based on urethane for improving the workability of hydraulic binders, and their preparation)

IT 818-61-1DP, Ethylene glycol monoacrylate, urethane acrylates,

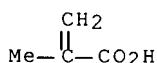
polymers 4098-71-9DP, Isophorone diisocyanate, urethane acrylates, polymers 9004-74-4DP, Methoxy polyethylene glycol, urethane acrylates, polymers 306283-30-7P 306284-16-2P 306284-17-3P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(acrylic copolymer agents based on urethane for improving the workability of hydraulic binders, and their preparation)

IT 79-41-4DP, Methacrylic acid, polymers with urethane acrylates
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (acrylic copolymer agents based on urethane for improving the workability of hydraulic binders, and their preparation)

RN 79-41-4 HCPLUS

CN 2-Propenoic acid, 2-methyl- (CA INDEX NAME)

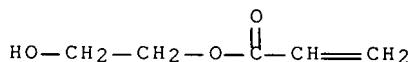


IT 818-61-1DP, Ethylene glycol monoacrylate, urethane acrylates, polymers 9004-74-4DP, Methoxy polyethylene glycol, urethane acrylates, polymers
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(acrylic copolymer agents based on urethane for improving the workability of hydraulic binders, and their preparation)

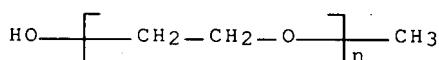
RN 818-61-1 HCPLUS

CN 2-Propenoic acid, 2-hydroxyethyl ester (CA INDEX NAME)



RN 9004-74-4 HCPLUS

CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -hydroxy- (CA INDEX NAME)



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 22 OF 59 HCPLUS COPYRIGHT 2007 ACS on STN

AN 2000:705076 HCPLUS Full-text

DN 133:270573

TI Concrete additive for controlling flowability

IN Hirata, Tsuyoshi; Yuasa, Tsutomu; Nagare, Koichiro; Kawakami, Hirokatsu

PA Nippon Shokubai Co., Ltd., Japan

SO Eur. Pat. Appl., 40 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1041053	A1	20001004	EP 2000-400645	20000309
	EP 1041053	B1	20060802		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2001192250	A	20010717	JP 2000-64302	20000309
	US 6545083	B1	20030408	US 2000-522300	20000309
PRAI	JP 1999-61337	A	19990309		
	JP 1999-303797	A	19991026		
AB	The concrete additive comprises a copolymer (A) obtained by polymerizing a monomer mixture containing a polyalkylene glycol ester monomer (I) represented by the general formula (1), a polyalkylene glycol ester monomer (II) represented by the general formula (2), and a carboxylic acid monomer (III) represented by the general formula (3). The additive is added with water into cementitious concrete and mortar mixes containing an air-entraining agent to increase the flowability retaining effect. The amount of entrained air can be reduced from 7.2% to 1.3-5.4% without decreasing the mortar flowability. The storage stability tests showed no ppt. after a month storage of the mortar.				
IC	ICM C04B024-26				
	ICS C08F220-06				
CC	58-2 (Cement, Concrete, and Related Building Materials)				
	Section cross-reference(s): 38				
ST	concrete mortar cement flowability polymer additive				
IT	Concrete modifiers				
	(air-entraining agents; polymeric additive for controlling flowability of concretes or mortars)				
IT	Concrete				
	Mortar				
	(controlled flowability of; polymeric additive for controlling flowability of concretes or mortars)				
IT	Concrete modifiers				
	(for flowability control; polymeric additive for controlling flowability of concretes or mortars)				
IT	Cement (construction material)				
	(polymeric additive for controlling flowability of concretes or mortars)				
IT	296776-22-2 296776-26-6 296776-29-9 296776-32-4				
	296776-35-7 296789-12-3				
	RL: MOA (Modifier or additive use); USES (Uses)				
	(polymeric additive for controlling flowability of concretes or mortars)				
IT	296776-29-9				
	RL: MOA (Modifier or additive use); USES (Uses)				
	(polymeric additive for controlling flowability of concretes or mortars)				
RN	296776-29-9 HCPLUS				
CN	2-Propenoic acid, 2-methyl-, telomer with ethoxyethene, 3-mercaptopropanoic acid, methyloxirane polymer with oxirane mono(2-methyl-2-propenoate) heptadecyl ether, and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), sodium salt (9CI) (CA INDEX NAME)				
CM	1				
CRN	296776-28-8				
CMF	(C17 H36 O . C4 H8 O . C4 H6 O2 . C4 H6 O2 . (C3 H6 O . C2 H4 O)x . (C2 H4 O)n C5 H8 O2)x . C3 H6 O2 S				

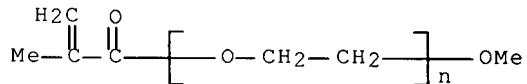
CM 2

CRN 107-96-0
CMF C3 H6 O2 SHS—CH₂—CH₂—CO₂H

CM 3

CRN 296776-27-7
CMF (C₁₇ H₃₆ O . C₄ H₈ O . C₄ H₆ O₂ . C₄ H₆ O₂ . (C₃ H₆ O . C₂ H₄ O)_x . (C₂ H₄ O)_n C₅ H₈ O₂)_x
CCI PMS

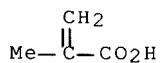
CM 4

CRN 26915-72-0
CMF (C₂ H₄ O)_n C₅ H₈ O₂
CCI PMS

CM 5

CRN 109-92-2
CMF C₄ H₈ OH₃C—CH₂—O—CH=CH₂

CM 6

CRN 79-41-4
CMF C₄ H₆ O₂

CM 7

CRN 296776-23-3

PEZZUTO

10/551268

9/18/07

54

CMF C17 H36 O . C4 H6 O2 . (C3 H6 O . C2 H4 O)x

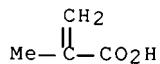
CM 8

CRN 1454-85-9
CMF C17 H36 O

Me—(CH₂)₁₆—OH

CM 9

CRN 79-41-4
CMF C4 H6 O2

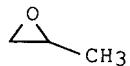


CM 10

CRN 9003-11-6
CMF (C3 H6 O . C2 H4 O)x
CCI PMS

CM 11

CRN 75-56-9
CMF C3 H6 O



CM 12

CRN 75-21-8
CMF C2 H4 O



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 23 OF 59 HCPLUS COPYRIGHT 2007 ACS on STN

KATHLEEN FULLER EIC1700 571/272-2505

AN 2000:160988 HCPLUS Full-text

DN 132:211706

TI Surfactant composition and its use as a dispersing agent in
concrete

IN Yamato, Fuzio; Sato, Takahiro; Hamada, Daisuke

PA Kao Corporation, Japan

SO Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 983976	A1	20000308	EP 1999-116781	19990831
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2000143314	A	20000523	JP 1999-51233	19990226
	JP 3188245	B2	20010716		
	CN 1246461	A	20000308	CN 1999-118364	19990901
PRAI	JP 1998-247088	A	19980901		
	JP 1999-51233	A	19990226		

AB The present invention provides a surfactant composition which is suitable for a **concrete** admixt. giving stable fluidity to **concrete** regardless of variation in kneading-time. That is, the present invention provides a surfactant composition comprising (a) a copolymer of a monomer mixture including a monomer having the formula $CH(R1):C(R2)(CH2)m1CO2(AO)nX$ and preferably at least one co-monomer selected from the group consisting of co-monomers having the formulas $C(R3)(R5):C(R4)(CH2)m2CO2M1$ and $CH2:C(R6)CH2SO3Y$ resp., and comprising (b) a water-soluble salt of an aromatic sulfonic acid, at a specific ratio; in which R1 and R2 are hydrogen atom or Me, m1 is an integer of zero to 2, (AO) is an oxyalkylene having 2 or 3 carbon atoms, n is a number of 2 to 300 and X is hydrogen atom or an alkyl having 1 to 3 carbon atoms; in which R4 and R6 are hydrogen atom or methyl; R3 and R5 are hydrogen atom, Me or $M2O(CO)(CH2)m3$; M1, M2 and Y are hydrogen atom, an alkali metal, an alkaline earth metal, ammonium or a mono-, di- or tri-alkylammonium which may be substituted by hydroxide group; and m2 and m3 are an integer of zero to 2.

IC ICM C04B024-26

CC 58-2 (**Cement, Concrete, and Related Building
Materials**)ST surfactant dispersing agent **concrete**IT **Concrete**

Dispersing agents

Surfactants

(surfactant composition and its use as a dispersing agent in
concrete)

IT Acrylic polymers, uses

RL: MOA (Modifier or additive use); USES (Uses)

(surfactant composition and its use as a dispersing agent in
concrete)

IT 79-41-4D, Methacrylic acid, polymers 868-77-9D, polymers

1561-92-8D, Sodium methallyl sulfonate, polymers 3105-55-3D, Mono sodium maleate, polymers 5536-61-8D, Sodium methacrylate, polymers 9004-74-4D, polymers 122525-42-2, Mighty 150V-2 260429-25-2, Gralion S 8

RL: MOA (Modifier or additive use); USES (Uses)

(surfactant composition and its use as a dispersing agent in
concrete)

IT 79-41-4D, Methacrylic acid, polymers 868-77-9D, polymers

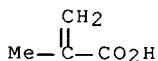
9004-74-4D, polymers

RL: MOA (Modifier or additive use); USES (Uses)

(surfactant composition and its use as a dispersing agent in concrete)

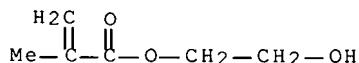
RN 79-41-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl- (CA INDEX NAME)



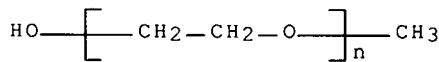
RN 868-77-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester (CA INDEX NAME)



RN 9004-74-4 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -hydroxy- (CA INDEX NAME)



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 24 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2000:120885 HCAPLUS Full-text

DN 132:167174

TI Redispersible vinyl polymer emulsion powders and their manufacture

IN Sugaya, Mamoru; Katsuki, Masami; Uebori, Soichi; Okayasu, Katsuyuki; Igarashi, Shin

PA Clariant Polymer K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000053711	A	20000222	JP 1998-227238	19980811
	TW 483899	B	20020421	TW 1999-88113567	19990809
	WO 2000009589	A1	20000224	WO 1999-JP4356	19990811
	W: CN, KR, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP	1038903	A1	20000927	EP 1999-937034	19990811
EP	1038903	B1	20060927		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
CN	1120855	B	20030910	CN 1999-801317	19990811
AT	340820	T	20061015	AT 1999-937034	19990811
PRAI	JP 1998-227238	A	19980811		

WO 1999-JP4356 W 19990811

AB Title powders, useful for **cement** admixts., adhesives, coatings, etc., comprise vinyl copolymer particles and anion-modified vinyl alc. polymers adsorbed on the surfaces of the particles. Thus, Me methacrylate 50, Bu acrylate 50, and methacrylic acid 3 part were polymerized in the presence of sulfonic acid-modified vinyl alc. polymer (Gohseran L 3266) and dried to give an emulsion power showing good mixability with **cement**.

IC ICM C08F002-24
ICS C08F002-44; C08F006-14; C08F008-00

CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 58

ST redispersible emulsion powder manuf **cement** admixt; vinyl copolymer particle polyvinyl alc adsorbed; polymethacrylate particle sulfonate polyvinyl alc adsorbed

IT **Cement** (construction material)
(admixts. for; redispersible vinyl polymer emulsion powders for **cement**)

IT 25035-69-2P, Butyl acrylate-methacrylic acid-methyl methacrylate copolymer
143478-80-2P, Butyl acrylate-methacrylic acid-methyl methacrylate-Veova 10 copolymer
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(redispersible vinyl polymer emulsion powders for **cement**)

IT 9002-89-5D, Poly(vinyl alcohol), sulfonic acid- or carboxyl-modified 52410-51-2, Gohsenal T 330 97048-76-5, Gohseran L 3266
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(redispersible vinyl polymer emulsion powders for **cement**)

IT **143478-80-2P**, Butyl acrylate-methacrylic acid-methyl methacrylate-Veova 10 copolymer
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(redispersible vinyl polymer emulsion powders for **cement**)

RN 143478-80-2 HCPLUS

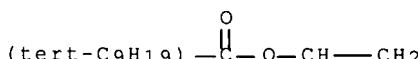
CN tert-Decanoic acid, ethenyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 26544-09-2

CMF C12 H22 O2

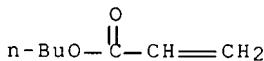
CCI IDS



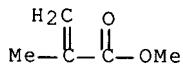
CM 2

CRN 141-32-2

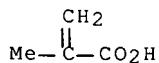
CMF C7 H12 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2

CM 4

CRN 79-41-4
CMF C4 H6 O2

L69 ANSWER 25 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1999:548726 HCAPLUS Full-text
 DN 131:261439
 TI Synthesis of calcium silicate hydrate/polymer complexes: Part I. Anionic and nonionic polymers
 AU Matsuyama, Hiroyoshi; Young, J. Francis
 CS Center for Advanced Cement-Based Materials, University of Illinois at Urbana-Champaign, Urbana, IL, 61801, USA
 SO Journal of Materials Research (1999), 14(8), 3379-3388
 CODEN: JMREEE; ISSN: 0884-2914
 PB Materials Research Society
 DT Journal
 LA English
 AB High mol. weight anionic polymers have been incorporated into the calcium silicate hydrate (C-S-H) structure during precipitation of quasi-crystalline C-S-H from aqueous solution. The anionic polymers studied were poly(methacrylic acid), poly(acrylic acid), and the sodium salt of poly(vinyl sulfonic acid). Expansion of the interlayer spacing coupled with high-carbon contents confirmed that the polymers intercalated between the layers. D-gluconic acid behaves similarly. Intercalation characteristics strongly depended on both the type of polymer and Ca/Si molar ratio of C-S-H; intercalation reached a maximum at an initial Ca/Si = 1.3 in all cases. Poly(vinyl alc.) was the only nonionic polymer among those studied that was incorporated into C-S-H. Evidence for interlayer intercalation is less definite. The C-S-H/polymer complexes were examined by Fourier transform IR spectroscopy, ²⁹Si NMR magic angle spinning, and ¹³C cross-polarization, magic angle spinning NMR spectroscopy.
 CC 58-1 (Cement, Concrete, and Related Building Materials)
 Section cross-reference(s): 38
 IT Cement (construction material)
 (portland; synthesis of calcium silicate hydrate intercalation complexes with anionic and nonionic polymers and gluconic acid)
 IT 110-15-6DP, Succinic acid, intercalation with calcium silicate hydrate

110-16-7DP, Maleic acid, intercalation with calcium silicate hydrate 526-95-4DP, D-Gluconic acid, intercalation products with calcium silicate hydrate **9002-89-5DP**, Poly(vinyl alcohol), intercalation product with calcium silicate hydrate 9003-01-4DP, Poly(acrylic acid), intercalation product with calcium silicate hydrate 9003-39-8DP, Polyvinylpyrrolidone, intercalation product with calcium silicate hydrate 25053-27-4DP, Poly(vinyl sulfonic acid) sodium salt, intercalation product with calcium silicate hydrate 25087-26-7DP, Poly(methacrylic acid), intercalation product with calcium silicate hydrate 25322-68-3DP, Poly(ethylene oxide), intercalation product with calcium silicate hydrate 30551-89-4DP, Poly(allylamine), intercalation product with calcium silicate hydrate

RL: SPN (Synthetic preparation); PREP (Preparation)

(synthesis of calcium silicate hydrate intercalation complexes with anionic and nonionic polymers and gluconic acid)

IT **110-16-7DP**, Maleic acid, intercalation with calcium silicate hydrate **9002-89-5DP**, Poly(vinyl alcohol), intercalation product with calcium silicate hydrate

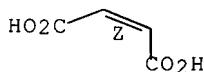
RL: SPN (Synthetic preparation); PREP (Preparation)

(synthesis of calcium silicate hydrate intercalation complexes with anionic and nonionic polymers and gluconic acid)

RN 110-16-7 HCPLUS

CN 2-Butenedioic acid (2Z)- (CA INDEX NAME)

Double bond geometry as shown.



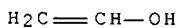
RN 9002-89-5 HCPLUS

CN Ethenol, homopolymer (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O



RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 26 OF 59 HCPLUS COPYRIGHT 2007 ACS on STN

AN 1999:511114 HCPLUS Full-text

DN 131:148156

TI Concrete hardening retarder

IN Ikuta, Toru; Mutsuda, Mitsuteru

PA Daicel-Huels Ltd., Japan

SO PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

KATHLEEN FULLER EIC1700

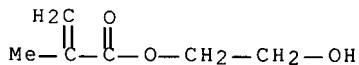
571/272-2505

PI	WO 9940041	A1	19990812	WO 1999-JP516	19990205	
	W: AU, BR, CA, CN, ID, KR, SG, US					
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
	CA 2286199	A1	19990812	CA 1999-2286199	19990205	
	AU 9922997	A	19990823	AU 1999-22997	19990205	
	AU 753326	B2	20021017			
	JP 11314954	A	19991116	JP 1999-28427	19990205	
	EP 974562	A1	20000126	EP 1999-902849	19990205	
	R: DE, FR, GB, IT					
	US 6730764	B1	20040504	US 1999-402537	19991215	
PRAI	JP 1998-25296	A	19980206			
	WO 1999-JP516	W	19990205			
AB	A concrete hardening retarder comprises a polymer (A) having the ability to retard concrete hardening. The polymer (A) comprises structural units derived from an ingredient capable of bringing about a glass transition temperature (Tg) of $\leq -5^\circ$. The retarder has a surface tension of 45 mN/m or lower. The content of those units is .apprx.10% or higher based on the whole polymer (A). The polymer (A) has a functional group capable of forming a salt with a metal ion (especially a free acid group or a group capable of generating an acid group through hydrolysis). The polymer (A) may be a vinyl polymer, a polyester (saturated or unsatd. polyester), or a cross-linked or graft polymer obtained from an unsatd. polyester. A sheet or decorative-material pack may be formed from the retarder. By use of the retarder, sheet, pack, or the like, the stain removability and washability of tile-adhered concrete panels are improved.					
IC	ICM C04B024-28					
	ICS C04B024-26; C04B103-22; B28B001-14; B28B011-02; E04F013-08					
CC	58-2 (Cement, Concrete, and Related Building Materials)					
	Section cross-reference(s): 38					
ST	vinyl polymer concrete hardening retarder; polyester concrete hardening retarder					
IT	Polyesters, uses					
	RL: TEM (Technical or engineered material use); USES (Uses) (concrete hardening retarders containing)					
IT	Polymers, uses					
	RL: TEM (Technical or engineered material use); USES (Uses) (graft; concrete hardening retarders containing)					
IT	Concrete					
	(hardening retarders containing vinyl polymers or polyesters for)					
IT	Vinyl compounds, uses					
	RL: TEM (Technical or engineered material use); USES (Uses) (polymers; concrete hardening retarders containing)					
IT	111488-39-2 235114-58-6 235114-59-7 235114-60-0					
	RL: TEM (Technical or engineered material use); USES (Uses) (concrete hardening retarders containing)					
IT	235114-58-6					
	RL: TEM (Technical or engineered material use); USES (Uses) (concrete hardening retarders containing)					
RN	235114-58-6 HCAPLUS					
CN	2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ethenyl acetate, 2-ethylhexyl 2-propenoate, 2,5-furandione and 1,2-propanediol (9CI) (CA INDEX NAME)					

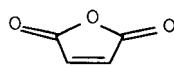
CM 1

CRN 868-77-9

CMF C6 H10 O3



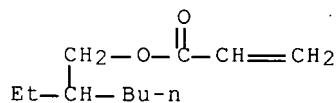
CM 2

CRN 108-31-6
CMF C4 H2 O3

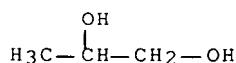
CM 3

CRN 108-05-4
CMF C4 H6 O2

CM 4

CRN 103-11-7
CMF C11 H20 O2

CM 5

CRN 57-55-6
CMF C3 H8 O2RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 27 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1999:139770 HCAPLUS Full-text

DN 130:183244

TI Thickening agents from polymers containing carboxy and carboxamide groups

IN Weitzel, Hans-Peter; Braunsperger, Robert

PA Wacker-Chemie GmbH, Germany

SO Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 897937	A1	19990224	EP 1998-114363	19980730
	EP 897937	B1	20000322		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	DE 19735736	A1	19990225	DE 1997-19735736	19970818
	AT 190987	T	20000415	AT 1998-114363	19980730
	ES 2144887	T3	20000616	ES 1998-114363	19980730
	JP 11152302	A	19990608	JP 1998-230553	19980817
	JP 3002182	B2	20000124		
	BR 9803767	A	19991214	BR 1998-3767	19980817
	US 6197871	B1	20010306	US 2000-500946	20000115
PRAI	DE 1997-19735736	A	19970818		
	US 1998-129006	B1	19980804		

AB Water-soluble polymers with low viscosity and good storage stability for thickening agents are prepared by emulsion or suspension polymerization of carboxy-containing ethylenically unsatd. monomers 30-70, carboxamide group-containing ethylenically unsatd. monomers 10-70, and other ethylenically unsatd. monomers 0.1-30% in the presence of a protective colloid. Emulsion polymerization of acrylamide 147.4, acrylic acid 44.2, and Bu acrylate 17.7 g in the presence of partially esterified poly(vinyl alc.) gave a dispersion with solids content 10.8%, particle size 354 nm, viscosity 450 mPa-s, and very good stability. A mortar composition containing Portland cement, quartz sand, and the polymer dispersion had a vertical flow of 10, 4, 1.5 and 1 cm after 1, 3, 5, and 10 min, resp.

IC ICM C08F220-04

ICS C08F220-54

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 38, 58

IT 9002-89-5D, Poly(vinyl alcohol), partially esterified

RL: TEM (Technical or engineered material use); USES (Uses)
(protective colloid; emulsion and suspension preparation of carboxy and carboxamide group-containing polymer dispersions for thickening agents)

IT 79-10-7D, Acrylic acid, polymers 79-41-4D, Methacrylic acid, polymers 9003-39-8, Poly(vinylpyrrolidone)

RL: TEM (Technical or engineered material use); USES (Uses)
(protective colloid; thickening agents from carboxy and carboxamide group-containing polymer dispersions containing)

IT 9002-89-5D, Poly(vinyl alcohol), partially esterified

RL: TEM (Technical or engineered material use); USES (Uses)
(protective colloid; emulsion and suspension preparation of carboxy and carboxamide group-containing polymer dispersions for thickening agents)

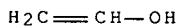
RN 9002-89-5 HCAPLUS

CN Ethenol, homopolymer (CA INDEX NAME)

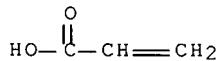
CM 1

CRN 557-75-5

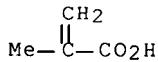
CMF C2 H4 O



IT 79-10-7D, Acrylic acid, polymers 79-41-4D, Methacrylic acid, polymers
 RL: TEM (Technical or engineered material use); USES (Uses)
 (protective colloid; thickening agents from carboxy and carboxamide group-containing polymer dispersions containing)
 RN 79-10-7 HCAPLUS
 CN 2-Propenoic acid (CA INDEX NAME)



RN 79-41-4 HCAPLUS
 CN 2-Propenoic acid, 2-methyl- (CA INDEX NAME)



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 28 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1998:675368 HCAPLUS Full-text
 DN 129:346482
 TI Short fiber to reinforce lightweight aerated **concrete**
 IN Shigeno, Haruo; Murayama, Sadamitsu; Matsui, Yukikage
 PA Teijin Ltd., Japan
 SO Jpn. Kokai Tokyo Koho, 5 pp.
 CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 10279335	A	19981020	JP 1997-82604	19970401
PRAI JP 1997-82604		19970401		

AB The title article comprises fibers which can retain strength $\geq 70\%$ when immersed in an alkali solution with pH 13 at 160° for 10 h. Fibers are bound by a water-soluble sizing agent to form fiber bundles, which must be disintegrated into monofilaments when immersed in water within the period of time from 3 s to 3 min. Thus, 1.0 weight% aramid fiber bundles bound by KP 2007 (nylon-based size) (1500 denier/1000 filaments) with length 12 mm was mixed into a mixture comprising ground silica stone, CaO, **cement**, Al powder and water, cast into a mold, aerated and autoclaved at 180° for 10 h to give fiber reinforced aerated **concrete** with bulk sp. gr. 0.53 and bending strength 48.9 kg/cm².

IC ICM C04B016-06

ICS C04B038-00; D01F006-60
CC 58-2 (**Cement, Concrete, and Related Building Materials**)
Section cross-reference(s): 40
ST aerated **concrete** fiber reinforcement autoclaving; sizing aramid fiber lightwt **concrete**
IT Polyamide fibers, uses
RL: MOA (Modifier or additive use); USES (Uses)
(aramid, Technora T 200; sized short fiber to reinforce lightweight aerated **concrete**)
IT **Concrete**
(fiber-reinforced; sized short fiber to reinforce lightweight aerated **concrete**)
IT **Concrete**
(lightwt.; sized short fiber to reinforce lightweight aerated **concrete**)
IT Polyethers, uses
RL: MOA (Modifier or additive use); USES (Uses)
(polyamide-, aromatic, fiber; sized short fiber to reinforce lightweight aerated **concrete**)
IT Polyethers, uses
Polyethers, uses
RL: MOA (Modifier or additive use); USES (Uses)
(polyamide-, fiber, aromatic; sized short fiber to reinforce lightweight aerated **concrete**)
IT Synthetic polymeric fibers, uses
Synthetic polymeric fibers, uses
RL: MOA (Modifier or additive use); USES (Uses)
(polyamide-polyethers, aromatic; sized short fiber to reinforce lightweight aerated **concrete**)
IT Polyamides, uses
RL: MOA (Modifier or additive use); USES (Uses)
(polyether-, aromatic, fiber; sized short fiber to reinforce lightweight aerated **concrete**)
IT Polyamide fibers, uses
Polyamide fibers, uses
RL: MOA (Modifier or additive use); USES (Uses)
(polyether-, aromatic; sized short fiber to reinforce lightweight aerated **concrete**)
IT **Concrete**
(porous; sized short fiber to reinforce lightweight aerated **concrete**)
IT Sizes (agents)
(sized short fiber to reinforce lightweight aerated **concrete**)
IT 9002-89-5D, PolyVinyl alcohol, polymers
RL: MOA (Modifier or additive use); USES (Uses)
(OSK 9013G, sizing agent; sized short fiber to reinforce lightweight aerated **concrete**)
IT 66559-37-3, 3,4'-Diaminodiphenyl ether-p-phenylenediamine-terephthalic acid copolymer
RL: MOA (Modifier or additive use); USES (Uses)
(fiber; sized short fiber to reinforce lightweight aerated **concrete**)
IT 79-10-7D, 2-Propenoic acid, derivs., polymers, uses 120146-86-3,
KP 2007 215512-83-7, Plascize RD 122
RL: MOA (Modifier or additive use); USES (Uses)
(sizing agent; sized short fiber to reinforce lightweight aerated **concrete**)
IT 9002-89-5D, PolyVinyl alcohol, polymers
RL: MOA (Modifier or additive use); USES (Uses)

(OSK 9013G, sizing agent; sized short fiber to reinforce lightweight aerated **concrete**)

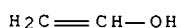
RN 9002-89-5 HCPLUS

CN Ethenol, homopolymer (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O

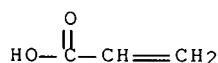


IT 79-10-7D, 2-Propenoic acid, derivs., polymers, uses
RL: **MOA (Modifier or additive use); USES (Uses)**

(sizing agent; sized short fiber to reinforce lightweight aerated **concrete**)

RN 79-10-7 HCPLUS

CN 2-Propenoic acid (CA INDEX NAME)



L69 ANSWER 29 OF 59 HCPLUS COPYRIGHT 2007 ACS on STN

AN 1998:214605 HCPLUS Full-text

DN 128:260865

TI **Cement** admixtures made of poly(vinyl alcohol)-type polymers

IN Nagao, Masahiro; Sato, Sumiaki

PA Kuraray Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 10087937	A	19980407	JP 1996-245902	19960918
PRAI JP 1996-245902		19960918		

AB The **cement** admixts. comprise poly(vinyl alc.)-type polymers which are $\geq 60\%$ -soluble in saturated $\text{Ca}(\text{OH})_2$ solns. at 40° . The admixts. give **cement** compns. with excellent bending strength, compression hardness, surface hardness, etc.

IC ICM C08L029-04

ICS C08F016-06; C08F222-02

CC 58-1 (**Cement, Concrete, and Related Building Materials**)

Section cross-reference(s): 38

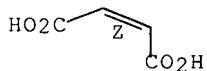
ST polyvinyl alc **cement** admixt bending strength

IT **Cement** (construction material)
(portland; **cement** admixts. made of poly(vinyl alc.)-type polymers)

IT 97-65-4D, Itaconic acid, reaction products with poly(vinyl alc.)
110-16-7D, Maleic acid, reaction products with poly(vinyl alc.)
9002-89-5, Poly(vinyl alcohol) 9002-89-5D, Poly(vinyl alcohol),

acid-modified
 RL: TEM (Technical or engineered material use); USES (Uses)
 (cement admixts. made of poly(vinyl alc.)-type polymers)
 IT 110-16-7D, Maleic acid, reaction products with poly(vinyl alc.)
 9002-89-5D, Poly(vinyl alcohol), acid-modified
 RL: TEM (Technical or engineered material use); USES (Uses)
 (cement admixts. made of poly(vinyl alc.)-type polymers)
 RN 110-16-7 HCPLUS
 CN 2-Butenedioic acid (2Z)- (CA INDEX NAME)

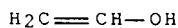
Double bond geometry as shown.



RN 9002-89-5 HCPLUS
 CN Ethenol, homopolymer (CA INDEX NAME)

CM 1

CRN 557-75-5
 CMF C2 H4 O



L69 ANSWER 30 OF 59 HCPLUS COPYRIGHT 2007 ACS on STN
 AN 1997:699117 HCPLUS Full-text
 DN 127:335661
 TI Modified poly(vinyl alcohol) sizes and cement reinforcement
 fibers thereof
 IN Nishiguchi, Hiroshi; Watanabe, Toshio; Kitada, Akira
 PA Daiichi Kogyo Seiyaku Co., Ltd., Japan
 SO Jpn. Kokai Tokyo Koho, 5 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 09278503	A	19971028	JP 1996-83667	19960405
PRAI JP 1996-83667		19960405		
AB	The sizes contain modified poly(vinyl alcs.) with anionic groups, preferably those obtained by Michael addition of poly(vinyl alc.) and vinyl compds. followed by hydrolysis. Reinforcement fibers coated with the sizes are also claimed. The sizes show good film formability and the films on fibers can be easily dissolved in cement compns., thereby offering homogeneous dispersion of monofilaments.			
IC	ICM C04B020-10 ICS C04B014-38; C04B016-06; D06M015-333			
CC	58-1 (Cement, Concrete, and Related Building Materials) Section cross-reference(s): 38, 40			
ST	polyvinyl alc size cement reinforcement fiber; vinyl polyvinyl			

IT alc Michael addn size

IT Polyamide fibers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(aramid; modified poly(vinyl alc.) sizes and **cement**
reinforcement fibers thereof)

IT Sizes (agents)
(modified poly(vinyl alc.) sizes and **cement** reinforcement
fibers thereof)

IT Acrylic fibers, uses
Vinal fibers
RL: TEM (Technical or engineered material use); USES (Uses)
(modified poly(vinyl alc.) sizes and **cement** reinforcement
fibers thereof)

IT **Cement** (construction material)
(portland; modified poly(vinyl alc.) sizes and **cement**
reinforcement fibers thereof)

IT 79-06-1DP, Acrylamide, Michael addition product with poly(vinyl alc.)
107-13-1P, Acrylonitrile, preparation 108-31-6DP, Maleic
anhydride, reaction products with poly(vinyl alc.) 9002-89-5DP,
Poly(vinyl alcohol), carboxy-modified 9003-20-7DP, Poly(vinyl acetate),
saponified 15214-89-8DP, 2-Acrylamido-2-methylpropanesulfonic acid, Michael
addition product with poly(vinyl alc.)
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
(modified poly(vinyl alc.) sizes and **cement** reinforcement
fibers thereof)

IT 108-31-6DP, Maleic anhydride, reaction products with poly(vinyl
alc.) 9002-89-5DP, Poly(vinyl alcohol), carboxy-modified
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
(modified poly(vinyl alc.) sizes and **cement** reinforcement
fibers thereof)

RN 108-31-6 HCPLUS

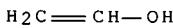
CN 2,5-Furandione (CA INDEX NAME)



RN 9002-89-5 HCPLUS
CN Ethenol, homopolymer (CA INDEX NAME)

CM 1

CRN 557-75-5
CMF C2 H4 O



L69 ANSWER 31 OF 59 HCPLUS COPYRIGHT 2007 ACS on STN
AN 1997:90363 HCPLUS Full-text
DN 126:105681
TI Polymers modified with cyclodextrin derivatives containing N heterocycles,
and their use

IN Hirsenkorn, Rolf; Reuscher, Helmut; Haas, Wolfgang
 PA Consortium fuer Elektrochemische Industrie G.m.b.H, Germany
 SO Ger. Offen., 30 pp.
 CODEN: GWXXBX

DT Patent
 LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19520989	A1	19961212	DE 1995-19520989	19950608
PRAI	DE 1995-19520989		19950608		
OS	MARPAT 126:105681				

AB The heterocycles are the typical fiber-reactive groups found in reactive dyes, e.g., halotriazines and halopyrimidines, and they permit the attachment of cyclodextrin complex-forming functionality to other polymers. Aqueous dispersions of the modified polymers can serve as binders for paper, coatings, and **cement**.

IC ICM C08B037-16
 ICS C04B026-28; C04B024-38; D21H017-24; C08L005-16; C09J105-16;
 C09D105-16; D06M017-00; C09D005-34

ICA A01N025-10; C09K015-04; D06M015-03; C08G063-91; C08G069-48; C08G073-02;
 C08G008-28; C08G012-40; C08G018-83; C08G059-14; C08G077-388

CC 44-5 (Industrial Carbohydrates)

Section cross-reference(s): 37, 42, 43, 58

ST polymer modification cyclodextrin deriv; paper binder cyclodextrin modified polymer; coating cyclodextrin modified polymer; **cement** binder cyclodextrin modified polymer

IT **Concrete**

Mortar

Paper

Spackling compound

(polymers modified with cyclodextrin derivs. containing N heterocycles as binders for)

IT 24937-78-8P, Ethylene-vinyl acetate copolymer 25037-33-6P,
 Acrylamide-butyl acrylate-styrene copolymer 33773-82-9P,
 Acrylamide-acrylic acid-sodium vinylsulfonate copolymer
185846-51-9P, Acrylic acid-ethylene-2-hydroxyethyl acrylate-vinyl acetate-vinyl laurate copolymer

RL: IMF (Industrial manufacture); PREP (Preparation)

(preparation in presence of cyclodextrin derivs. containing reactive N heterocycles)

IT **185846-50-8P**, Acrylic acid-2-ethylhexyl acrylate-methyl methacrylate-N-methylolacrylamide-vinyl acetate-vinyl laurate copolymer
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (preparation in presence of polymer modified with cyclodextrin derivs. containing reactive N heterocycles)

IT **185846-51-9P**, Acrylic acid-ethylene-2-hydroxyethyl acrylate-vinyl acetate-vinyl laurate copolymer
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (preparation in presence of cyclodextrin derivs. containing reactive N heterocycles)

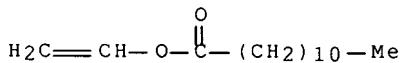
RN 185846-51-9 HCPLUS

CN Dodecanoic acid, ethenyl ester, polymer with ethene, ethenyl acetate, 2-hydroxyethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

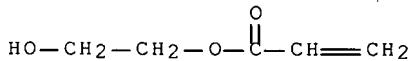
CM 1

CRN 2146-71-6

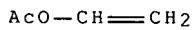
CMF C14 H26 O2



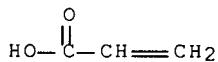
CM 2

CRN 818-61-1
CMF C5 H8 O3

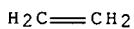
CM 3

CRN 108-05-4
CMF C4 H6 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

CM 5

CRN 74-85-1
CMF C2 H4

IT 185846-50-8P, Acrylic acid-2-ethylhexyl acrylate-methyl methacrylate-N-methylolacrylamide-vinyl acetate-vinyl laurate copolymer
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (preparation in presence of polymer modified with cyclodextrin derivs.
 containing reactive N heterocycles)

RN 185846-50-8 HCPLUS

CN Dodecanoic acid, ethenyl ester, polymer with ethenyl acetate, 2-ethylhexyl

PEZZUTO

10/551268

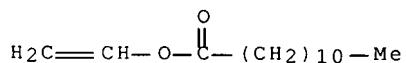
9/18/07

70

2-propenoate, N-(hydroxymethyl)-2-propenamide, methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

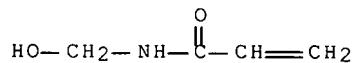
CM 1

CRN 2146-71-6
CMF C14 H26 02



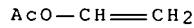
CM 2

CRN 924-42-5
CMF C4 H7 N 02



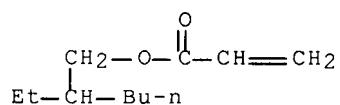
CM 3

CRN 108-05-4
CMF C4 H6 O2



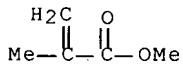
CM 4

CRN 103-11-7
CMF C11 H20 O2

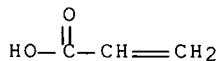


CM 5

CRN 80-62-6
CMF C5 H8 O2



CM 6

CRN 79-10-7
CMF C3 H4 O2

L69 ANSWER 32 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN

AN. 1996:718139 HCAPLUS Full-text

DN 125:329778

TI Copolymers of oxyalkyleneglycol alkenyl ethers and derivatives of unsaturated dicarboxylic acids as additives for hydraulic binders
IN Albrecht, Gerhard; Weichmann, Josef; Penkner, Johann; Kern, Alfred
PA Skw Trostberg Aktiengesellschaft, Germany
SO Eur. Pat. Appl., 18 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 736553	A2	19961009	EP 1996-105446	19960404
	EP 736553	A3	19980107		
	EP 736553	B1	20010620		
	R: AT, BE, CH, DE, DK, ES, FI, FR, GB, IT, LI, NL, SE DE 19513126	A1	19961010	DE 1995-19513126	19950407
	NO 9601258	A	19961008	NO 1996-1258	19960328
	NO 319248	B1	20050704		
	CA 2173570	A1	19961008	CA 1996-2173570	19960404
	AT 202368	T	20010715	AT 1996-105446	19960404
	ES 2158180	T3	20010901	ES 1996-105446	19960404
	HU 9600903	A2	19970428	HU 1996-903	19960405
	PL 186844	B1	20040331	PL 1996-313654	19960405
	JP 08283350	A	19961029	JP 1996-85540	19960408
	JP 3429410	B2	20030722		
	BR 9601288	A	19980113	BR 1996-1288	19960408
	US 5798425	A	19980825	US 1996-628057	19960408

PRAI DE 1995-19513126 A 19950407

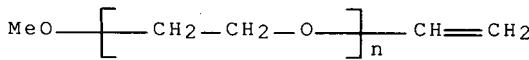
AB The title polymers, useful as additives for hydraulic binders (especially cement), are prepared from oxyalkylene glycol alkenyl ethers and derivs. of unsatd. dicarboxylic acids of specified structure. Aqueous redox polymerization of 0.334 mol maleic anhydride with 0.310 mol polyethylene glycol Me vinyl ether (mol. weight 500) and 6 mmol polypropylene glycol bismaleamate (mol. weight 2000) in the presence of NaOH gave a 34.7% solution of copolymer with pH 7.60. Concrete containing 0.24% this additive (based on cement) had spreading 560 and 500 mm after 10 and 30 min, resp., bulk d. 2.48 kg/m³, air volume 2.0%, and strength after 24 h 9.6 N/mm²; vs. 545, 455, 2.50, 1.1, and 14.5, resp., with a com. cement additive.

IC ICM C08F222-06

ICS C08F222-40; C08F222-20; C08F216-14; C04B024-26
 CC 35-4 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 58
 ST hydraulic binder additive copolymer; **cement** additive
 carboxylated copolymer; polyoxyethylene vinyl ether copolymer; maleic
 anhydride copolymer binder; carboxylic acid unsatd copolymer;
 polyoxyalkylene alkenyl ether copolymer
 IT **Cement**
Concrete
 (copolymers of oxyalkyleneglycol alkenyl ethers and derivs. of unsatd.
 dicarboxylic acids as additives for hydraulic binders)
 IT 108-31-6DP, Maleic anhydride, polymers with polyoxyalkylene
 alkenyl ethers and maleamic acid group-terminated siloxanes
 27252-80-8DP, Polyethylene glycol allyl methyl ether, polymers with maleic
 anhydride and siloxane diamines 50856-25-2DP, Polyethylene
 glycol methyl vinyl ether, polymers with maleic anhydride and maleamic
 acid group-terminated siloxanes 183553-19-7P, Dibutyl
 maleate-maleic anhydride-polyethylene glycol methyl vinyl ether copolymer
 sodium salt 183553-20-0P, Diallyl phthalate-maleic anhydride-
 polyethylene glycol methyl vinyl ether copolymer 183628-75-3P,
 Maleic anhydride-polyethylene glycol methyl vinyl ether-polypropylene
 glycol bis(maleamate) copolymer sodium salt 183628-77-5P
 183628-80-0P 183628-81-1P 183681-03-0P
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
 engineered material use); PREP (Preparation); USES (Uses)
 (copolymers of oxyalkyleneglycol alkenyl ethers and derivs. of unsatd.
 dicarboxylic acids as additives for hydraulic binders)
 IT 108-31-6DP, Maleic anhydride, polymers with polyoxyalkylene
 alkenyl ethers and maleamic acid group-terminated siloxanes
 50856-25-2DP, Polyethylene glycol methyl vinyl ether, polymers
 with maleic anhydride and maleamic acid group-terminated siloxanes
 183553-19-7P, Dibutyl maleate-maleic anhydride-polyethylene glycol
 methyl vinyl ether copolymer sodium salt 183628-75-3P, Maleic
 anhydride-polyethylene glycol methyl vinyl ether-polypropylene glycol
 bis(maleamate) copolymer sodium salt 183628-77-5P
 183681-03-0P
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
 engineered material use); PREP (Preparation); USES (Uses)
 (copolymers of oxyalkyleneglycol alkenyl ethers and derivs. of unsatd.
 dicarboxylic acids as additives for hydraulic binders)
 RN 108-31-6 HCPLUS
 CN 2,5-Furandione (CA INDEX NAME)



RN 50856-25-2 HCPLUS
 CN Poly(oxy-1,2-ethanediyl), α -ethenyl- ω -methoxy- (CA INDEX
 NAME)



RN 183553-19-7 HCPLUS

CN 2-Butenedioic acid (2Z)-, dibutyl ester, polymer with α -ethenyl- ω -methoxypoly(oxy-1,2-ethanediyl) and 2,5-furandione, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 183553-18-6

CMF (C₁₂ H₂₀ O₄)_n C₄ H₂ O₃ . (C₂ H₄ O)_n C₃ H₆ O)x

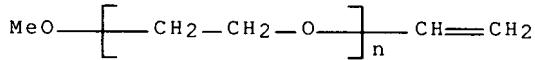
CCI PMS

CM 2

CRN 50856-25-2

CMF (C₂ H₄ O)_n C₃ H₆ O

CCI PMS



CM 3

CRN 108-31-6

CMF C₄ H₂ O₃

CM 4

CRN 105-76-0

CMF C₁₂ H₂₀ O₄

Double bond geometry as shown.



RN 183628-75-3 HCPLUS

CN 2,5-Furandione, polymer with (Z,Z)- α -(4-amino-1,4-dioxo-2-butenyl)- ω -[(4-amino-1,4-dioxo-2-butenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] and α -ethenyl- ω -methoxypoly(oxy-1,2-ethanediyl), sodium salt (9CI) (CA INDEX NAME)

CM 1

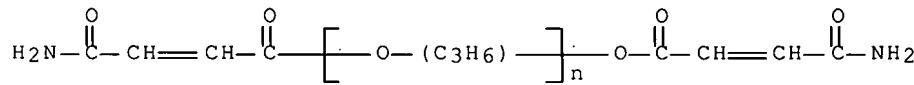
CRN 183628-74-2

CMF (C₄ H₂ O₃)_n C₈ H₈ N₂ O₅ . (C₂ H₄ O)_n C₃ H₆ O)x

CCI PMS

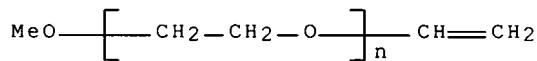
CM 2

CRN 183628-73-1
 CMF (C₃ H₆ O)_n C₈ H₈ N₂ O₅
 CCI IDS, PMS



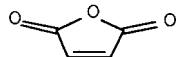
CM 3

CRN 50856-25-2
 CMF (C₂ H₄ O)_n C₃ H₆ O
 CCI PMS



CM 4

CRN 108-31-6
 CMF C₄ H₂ O₃



RN 183628-77-5 HCAPLUS

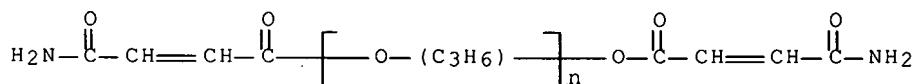
CN 2,5-Furandione, polymer with (Z,Z)- α -(4-amino-1,4-dioxo-2-butenyl)- ω -[(4-amino-1,4-dioxo-2-butenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)], ethenylbenzene and α -ethenyl- ω -methoxypoly(oxy-1,2-ethanediyl), sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 183628-76-4
 CMF (C₈ H₈ . C₄ H₂ O₃ . (C₃ H₆ O)_n C₈ H₈ N₂ O₅ . (C₂ H₄ O)_n C₃ H₆ O)x
 CCI PMS

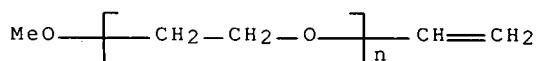
CM 2

CRN 183628-73-1
 CMF (C₃ H₆ O)_n C₈ H₈ N₂ O₅
 CCI IDS, PMS



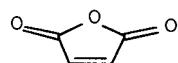
CM 3

CRN 50856-25-2
 CMF (C₂ H₄ O)_n C₃ H₆ O
 CCI PMS



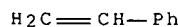
CM 4

CRN 108-31-6
 CMF C₄ H₂ O₃



CM 5

CRN 100-42-5
 CMF C₈ H₈



RN 183681-03-0 HCPLUS
 CN 2-Butenoic acid, 4-oxo-4-[(4-sulfophenyl)amino]-, disodium salt, (Z)-, polymer with (Z,Z)- α -(4-amino-1,4-dioxo-2-butenyl)- ω -[(4-amino-1,4-dioxo-2-butenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)], α -ethenyl- ω -methoxypoly(oxy-1,2-ethanediyl) and 2,5-furandione, sodium salt (9CI) (CA INDEX NAME)

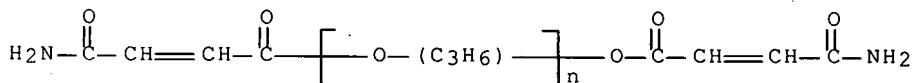
CM 1

CRN 183681-02-9
 CMF (C₁₀ H₉ N O₆ S . C₄ H₂ O₃ . (C₃ H₆ O)_n C₈ H₈ N₂ O₅ . (C₂ H₄ O)_n C₃ H₆ O . 2 Na)x
 CCI PMS

CM 2

CRN 183628-73-1

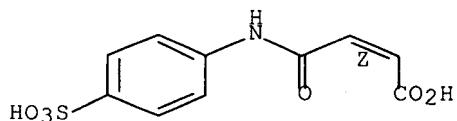
CMF (C₃ H₆ O)_n C₈ H₈ N₂ O₅
 CCI IDS, PMS



CM 3

CRN 134206-79-4
 CMF C₁₀ H₉ N O₆ S . 2 Na

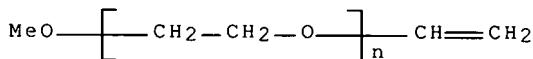
Double bond geometry as shown.



●2 Na

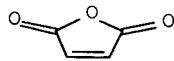
CM 4

CRN 50856-25-2
 CMF (C₂ H₄ O)_n C₃ H₆ O
 CCI PMS



CM 5

CRN 108-31-6
 CMF C₄ H₂ O₃



L69 ANSWER 33 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1995:963515 HCAPLUS Full-text

DN 123:342149

TI Redispersible polymer powder and its preparation and use
 IN Wutz, Konrad; Kern, Alfred; Weichmann, Josef

PA SKW Trostberg AG, Germany
 SO Ger. Offen., 10 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4406822	A1	19950907	DE 1994-4406822	19940302
	DE 4406822	C2	20021212		
PRAI	DE 1994-4406822		19940302		

AB A reaction product of a polyoxyalkylene, an unsatd. mono- or dicarboxylic acid or anhydride, and a primary or secondary amine and/or alc. is prepared and used as an additive in spray-dried polymer powders which show good redispersibility and are useful as additives in hydraulic binders, especially **cement**. A reaction product of an ethylene oxide-propylene oxide copolymer mono(3-sulfopropyl) ether Na salt, maleic anhydride, and polyethylene glycol mono-Me ether was added to a dispersion of an ethylene-vinyl acetate copolymer, and the dispersion was spray dried to give a powder which was used in mortar (**cement**-sand-water) for improving the flow and delaying hardening.

IC ICM C08L051-08
 ICS C08F283-06; C08F008-32; C08F008-14; C08F008-44; C08J003-12;
 C08J003-05; B29B013-06; C04B024-26

ICA C08F008-46; C08K003-36

ICI C08F283-06, C08F220-04, C08F222-02, C08F222-04; C08L051-08, C08L029-04

CC 37-6 (Plastics Manufacture and Processing)
 Section cross-reference(s): 58

ST EVA additive polymer powder redispersibility; **cement** additive
 EVA powder redispersibility; mortar additive EVA powder redispersibility;
 polyoxyalkylene carboxy deriv redispersibility EVA powder; spray drying
 EVA redispersibility additive; maleic polyoxyalkylene additive polymer
 redispersibility; dispersant polyoxyalkylene deriv EVA powder

IT **Cement**
 (powdered EVA containing additives for improved dispersibility in aqueous
 compns.
 containing)

IT 108-30-5DP, Succinic anhydride, reaction products with polyoxyalkylenes
 and amino and hydroxy compds. 108-31-6DP, Maleic anhydride,
 reaction products with polyoxyalkylenes and amino and hydroxy compds.
 515-74-2DP, Sulfanilic acid sodium salt, reaction products with maleic
 anhydride and polyoxyalkylenes 9004-74-4DP, Polyethylene glycol
 monomethyl ether, reaction products with maleic anhydride and
 polyoxyalkylenes 25322-68-3DP, Polyethylene glycol, reaction products
 with maleic anhydride and amino and hydroxy compds. 25322-69-4DP,
 Polypropylene glycol, reaction products with maleic anhydride and amino
 and hydroxy compds. 160274-44-2DP, Ethylene oxide-propylene oxide
 copolymer mono(3-sulfopropyl) ether sodium salt, reaction products with
 maleic anhydride and amino and hydroxy compds.

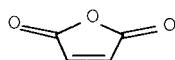
RL: IMF (Industrial manufacture); MOA (Modifier or additive use)
 ; POF (Polymer in formulation); PRP (Properties); PREP (Preparation); USES
 (Uses)
 (in spray-dried EVA powder for improved redispersibility in hydraulic
 binder compns.)

IT 108-31-6DP, Maleic anhydride, reaction products with
 polyoxyalkylenes and amino and hydroxy compds. 9004-74-4DP,
 Polyethylene glycol monomethyl ether, reaction products with maleic
 anhydride and polyoxyalkylenes
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use)
 ; POF (Polymer in formulation); PRP (Properties); PREP (Preparation); USES
 (Uses)

(in spray-dried EVA powder for improved redispersibility in hydraulic binder compns.)

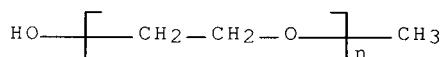
RN 108-31-6 HCPLUS

CN 2,5-Furandione (CA INDEX NAME)



RN 9004-74-4 HCPLUS

CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -hydroxy- (CA INDEX NAME)



L69 ANSWER 34 OF 59 HCPLUS COPYRIGHT 2007 ACS on STN

AN 1995:305067 HCPLUS Full-text

DN 122:57427

TI Copolymers based on maleic acid derivatives and vinyl monomers, their preparation and their use.

IN Albrecht, Gerhard; Leitner, Hubert; Lindenberger, Rudolf; Siedl, Richard; Werenna, Christian; Suter, Willi

PA Chemie Linz GmbH, Austria; Holderchem Holding AG

SO Eur. Pat. Appl., 18 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 610699	A1	19940817	EP 1994-100854	19940121
	EP 610699	B1	19961218		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
	AT 146489	T	19970115	AT 1994-100854	19940121
	ES 2098066	T3	19970416	ES 1994-100854	19940121
	NO 9400327	A	19940802	NO 1994-327	19940131
	AU 9454806	A	19940804	AU 1994-54806	19940131
	AU 672461	B2	19961003		
	BR 9400401	A	19940823	BR 1994-401	19940131
	ZA 9400643	A	19940919	ZA 1994-643	19940131
	JP 06322041	A	19941122	JP 1994-9800	19940131
	HU 67873	A2	19950529	HU 1994-270	19940131
	CA 2114688	A1	19940802	CA 1994-2114688	19940201
	FI 9400468	A	19940802	FI 1994-468	19940201
	US 5369198	A	19941129	US 1994-189642	19940201
PRAI	AT 1993-162	A	19930201		

AB The polymers contain 1-85 mol% units based on maleic acid monoester with polyoxyalkylene alkyl ether, 1-85 mol% units based on maleimide and(or) maleamic acid, 1-90 mol% units based on vinyl monomer, and optionally 0-50 mol% units based on maleic anhydride (I) and(or) acid and are obtained starting with maleic anhydride and the polyoxyalkylene ether followed by the N-containing component(s) and vinyl monomer. The polymers are useful as flow improvers for cement compns. and show less slump loss than prior-art

materials. Thus, I was treated with polyethylene glycol Me ether and Na sulfanilate and more I followed by styrene to give a copolymer which was added (0.17% solids) to **concrete**, providing degree of slump 202 mm initially and 152 mm after 90 min. Use of a conventional naphthalenesulfonate-HCHO additive resulted in an initial value of 190 mm (150 mm after 45 min).

IC ICM C08F222-20

ICS C08F222-40; C04B024-26

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 38, 58

ST maleic polymer **concrete** additive

IT **Concrete**

(preparation of maleic acid-based copolymer additives for **concrete**)

IT 100-42-5DP, Styrene, polymers with maleic acid derivs. 104-75-6DP, 2-Ethylhexylamine, reaction products with maleic anhydride, polymers with styrene and maleic acid derivs. 108-31-6DP, Maleic anhydride, derivs., polymers with styrene and maleic acid derivs. 108-91-8DP, Cyclohexylamine, reaction products with maleic anhydride, polymers with styrene and maleic acid derivs. 111-95-5DP, reaction products with maleic anhydride, polymers with styrene and maleic acid derivs.

515-74-2DP, Sodium sulfanilate, reaction products with maleic anhydride, polymers with styrene and maleic acid derivs. 941-69-5DP, N-Phenylmaleimide, polymers with styrene and maleic acid derivs.

1206-49-1DP, N-(2,6-Dimethylphenyl)maleimide, polymers with styrene and maleic acid derivs. 9004-74-4DP, Polyethylene glycol methyl ether, reaction products with maleic anhydride, polymers with styrene and maleic acid derivs. 28907-84-8DP, reaction products with maleic anhydride, polymers with styrene and maleic acid derivs. 68635-87-0DP, reaction products with maleic anhydride, polymers with styrene and maleic acid derivs. 90160-69-3DP, N-(4-Sulfophenyl)maleamic acid, polymers with styrene and maleic acid derivs. 106494-51-3DP, reaction products with maleic anhydride, polymers with styrene and maleic acid derivs.

RL: IMF (Industrial manufacture); MOA (Modifier or additive use)

; PREP (Preparation); USES (Uses)

(preparation of additives for **concrete**)

IT 108-31-6DP, Maleic anhydride, derivs., polymers with styrene and maleic acid derivs. 9004-74-4DP, Polyethylene glycol methyl ether, reaction products with maleic anhydride, polymers with styrene and maleic acid derivs.

RL: IMF (Industrial manufacture); MOA (Modifier or additive use)

; PREP (Preparation); USES (Uses)

(preparation of additives for **concrete**)

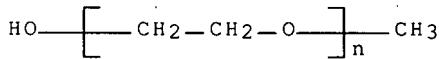
RN 108-31-6 HCPLUS

CN 2,5-Furandione (CA INDEX NAME)



RN 9004-74-4 HCPLUS

CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -hydroxy- (CA INDEX NAME)



L69 ANSWER 35 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1995:205630 HCAPLUS Full-text
DN 122:15767
TI Curing of **concrete** and curing sheets therefor
IN Mizukami, Yoshikatsu; Tanaka, Yutaka; Yonezawa, Toshio; Kojima, Masao
PA Kanebo Ltd, Japan; Takenaka Komuten Co
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06212799	A	19940802	JP 1993-279611	19931109
PRAI	JP 1992-324814	A1	19921109		

AB The title process comprises dismantling the **concrete** mold frame after pouring a **concrete** mix, attaching water-absorbing curing sheets to the surface of the molded **concrete** at wet state, feeding water to the curing sheets to swell and adhere tightly to the **concrete** surface, and curing the **concrete** under the wet state. The curing sheets made from single or laminated nonwoven fabrics containing 15-40 weight% fuse-bonding fibers and 10-50 weight% high-water absorptivity polymer molded member, and the concentration of the latter in the nonwoven fabrics is decreased along the thickness direction from one surface to the other surface at a decreasing rate of ≥ 2.5 weight%/mm. The high-water absorptivity polymer molded member is formed from copolymers of α, β -ethylenic unsatd. monomer having CO₂H group, α, β -ethylenic unsatd. monomer having OH group, and α, β -ethylenic unsatd. monomer having carboxylic acid alkali metal base and can absorb 800-2000 weight% saline, and it is preferably fibers. The curing process prevents drying of the **concrete** during curing and enhances the strength and durability.

IC ICM E04G021-02
ICS B28B011-00; C04B040-04; C08F220-06
CC 58-2 (**Cement, Concrete, and Related Building Materials**)
ST **concrete** curing nonwoven fabric sheet
IT **Concrete**

(curing of **concrete** by attaching nonwoven fabric curing sheets for enhanced strength and durability)

IT Polyester fibers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(nonwoven fabrics containing; curing of **concrete** by attaching nonwoven fabric curing sheets for enhanced strength and durability)
IT 105523-91-9 157561-35-8
RL: TEM (Technical or engineered material use); USES (Uses)
(fiber, nonwoven fabrics containing; curing of **concrete** by attaching nonwoven fabric curing sheets for enhanced strength and durability)

IT 159520-34-0, Aronzap RS 2
RL: TEM (Technical or engineered material use); USES (Uses)
(nonwoven fabrics containing; curing of **concrete** by attaching nonwoven fabric curing sheets for enhanced strength and durability)
IT 157561-35-8
RL: TEM (Technical or engineered material use); USES (Uses)
(fiber, nonwoven fabrics containing; curing of **concrete** by attaching nonwoven fabric curing sheets for enhanced strength and durability)

RN 157561-35-8 HCAPLUS

PEZZUTO

10/551268

9/18/07

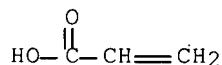
81

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ethenyl acetate, 2-propenoic acid and sodium 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7446-81-3

CMF C3 H4 O2 . Na

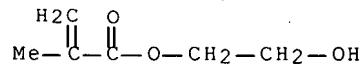


● Na

CM 2

CRN 868-77-9

CMF C6 H10 O3



CM 3

CRN 108-05-4

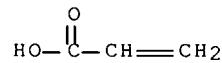
CMF C4 H6 O2



CM 4

CRN 79-10-7

CMF C3 H4 O2



L69 ANSWER 36 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1994:278546 HCAPLUS Full-text

DN 120:278546

TI Polymer coated cement based building materials

IN Watanabe, Masaki; Shimomura, Toshio; Yamamoto, Akihito

PA Dainippon Ink & Chemicals, Japan

KATHLEEN FULLER EIC1700

571/272-2505

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06016487	A	19940125	JP 1992-170713	19920629
PRAI	JP 1992-170713		19920629		

AB The materials are hardened product from **cement** containing mixts. with a coating of an aqueous dispersion of a polymer applied to the mixture immediately after molding before hardening. The polymer may be a copolymer of a vinyl ester of a tertiary C8-14 carboxylic acid, an α, β -alkenoic acid, and optionally another monomer copolymerizable with the above monomers. The materials have good weather resistance and hydrophobicity.

IC ICM C04B041-63

ICS B28B011-04; C04B028-02

ICA C09D005-00; C09D131-02

ICI C04B028-02, C04B024-26, C04B024-04, C04B024-00

CC 58-4 (**Cement, Concrete, and Related Building Materials**)

Section cross-reference(s): 38

ST **cement** based building material polymer coating

IT Building materials

(cement based, polymer coatings for)

IT Coating materials

(polymers, compns. and manufacture of, for **cement** based building materials)

IT 154707-75-2 154707-76-3 154707-77-4

RL: USES (Uses)

(coatings, **cement** based building materials with)

IT 154707-75-2 154707-77-4

RL: USES (Uses)

(coatings, **cement** based building materials with)

RN 154707-75-2 HCPLUS

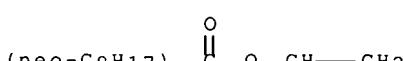
CN tert-Decanoic acid, ethenyl ester, polymer with butyl 2-propenoate, ethenyl neononanoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 54423-67-5

CMF C11 H20 O2

CCI IDS

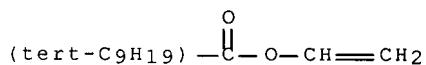


CM 2

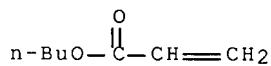
CRN 26544-09-2

CMF C12 H₂₂ O₂

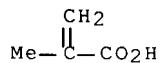
CCI IDS



CM 3

CRN 141-32-2
CMF C7 H12 O2

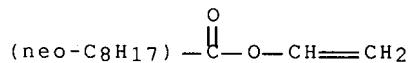
CM 4

CRN 79-41-4
CMF C4 H6 O2

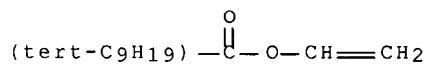
RN 154707-77-4 HCAPLUS

CN tert-Decanoic acid, ethenyl ester, polymer with butyl 2-propenoate, ethenyl neononanoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

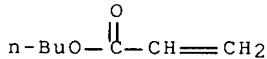
CM 1

CRN 54423-67-5
CMF C11 H20 O2
CCI IDS

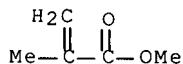
CM 2

CRN 26544-09-2
CMF C12 H22 O2
CCI IDS

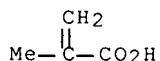
CM 3

CRN 141-32-2
CMF C7 H12 O2

CM 4

CRN 80-62-6
CMF C5 H8 O2

CM 5

CRN 79-41-4
CMF C4 H6 O2

L69 ANSWER 37 OF 59 HCPLUS COPYRIGHT 2007 ACS on STN

AN 1991:662064 HCPLUS Full-text

DN 115:262064

TI **Cement** slurry composition for semiflexural pavement

IN Tanaka, Yasuji; Harada, Akio; Tsukiyama, Fumitoshi

PA Showa Highpolymer Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03146450	A	19910621	JP 1989-279908	19891030
	JP 07065284	B	19950719		

PRAI JP 1989-279908 19891030

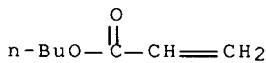
AB The title **cement** slurry composition comprises **cement**, water, and aqueous emulsion of copolymer comprising ethylene 1-50, vinyl acetate (b) and vinyl ester system monomer (c) (c/b = 0-2) 30-95, styrene monomer (e), acrylic ester monomer (f), and monomer (g) copolymerizable with styrene monomer and acrylic ester monomer (g/(e + f) = 0-10) 5-70 weight%, and optionally filler. Thus, a **cement** slurry comprising polymer **cement** 6000, ethylene-Bu acrylate-styrene-

vinyl acetate copolymer emulsion 500, and water 3500 parts had fluidity 12.3 s and its hardened body had bending strength 130.5 kg/cm² and standard water permeation 25.3 g vs. 80.4-120.6 kg/cm² and 34.5-99.5 g for control **cement** slurries.

IC ICM C04B024-26
 ICS C04B041-63; C08L031-02; C08L031-04; C08L033-06
 ICA C08F002-22
 CC 58-4 (**Cement, Concrete, and Related Building Materials**)
 ST pavement semiflexural **cement** slurry; polymer emulsion **cement** slurry pavement
 IT Pavements and Roads
 (semiflexural, polymer emulsion-containing **cement** slurries for)
 IT **Cement**
 (slurries, containing polymer emulsion, for semiflexural pavements)
 IT Fatty acids, esters
 RL: USES (Uses)
 (branched, vinyl esters, polymers, with Bu acrylate and ethylene and styrene and vinyl acetate, emulsions, **cement** slurries containing, for semiflexural pavements)
 IT 74-85-1D, Ethene, polymers with Bu acrylate and styrene and vinyl acetate and vinyl versatate 100-42-5D, polymers with Bu acrylate and ethylene and vinyl acetate and vinyl versatate 108-05-4D, Acetic acid ethenyl ester, polymers with Bu acrylate and ethylene and styrene and vinyl versatate 141-32-2D, polymers with ethylene and styrene and vinyl acetate and vinyl versatate 81666-28-6 117533-20-7
 RL: USES (Uses)
 (emulsion, **cement** slurries containing, for semiflexural pavements)
 IT 117533-20-7
 RL: USES (Uses)
 (emulsion, **cement** slurries containing, for semiflexural pavements)
 RN 117533-20-7 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethene, ethenyl acetate and ethenylbenzene (9CI) (CA INDEX NAME)

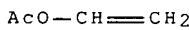
CM 1

CRN 141-32-2
 CMF C7 H12 O2



CM 2

CRN 108-05-4
 CMF C4 H6 O2



CM 3

CRN 100-42-5
CMF C8 H8 $\text{H}_2\text{C}=\text{CH}-\text{Ph}$

CM 4

CRN 79-41-4
CMF C4 H6 O2 $\text{Me}-\text{C}(\text{CH}_2)=\text{CO}_2\text{H}$

CM 5

CRN 74-85-1
CMF C2 H4 $\text{H}_2\text{C}=\text{CH}_2$

L69 ANSWER 38 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1991:662056 HCAPLUS Full-text
 DN 115:262056
 TI Cellular or foamed hydraulic compositions
 IN Chao, Yen Yau Harrison; Larson, Gary Robert; Linder, Linus William;
 Bauman, Michael Jo
 PA Rohm and Haas Co., USA
 SO Eur. Pat. Appl., 22 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 430576	A1	19910605	EP 1990-312702	19901121
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	CA 2029635	A1	19910523	CA 1990-2029635	19901109
	JP 03199177	A	19910830	JP 1990-317611	19901121
	BR 9005892	A	19910924	BR 1990-5892	19901121
	AU 9066832	A	19910530	AU 1990-66832	19901122
	US 5109030	A	19920428	US 1991-746078	19910812
PRAI	US 1989-441028	A	19891122		
AB	The compns. contain 25-135 weight parts hydraulic binder and 0.01-30 weight parts (based on the binder) polymeric foam stabilizer, in addition to				

conventional components, e.g., sand, setting agents, foaming agents, and surfactants, for cementitious and gypsum mixes. The foam stabilizer consists of 0.1-0.8 weight% of ≥ 1 nonionic, ethylenically unsatd. monomers and 2-40 weight% of ≥ 1 ionic or ionizable, ethylenically unsatd. monomers, and ≥ 1 of the monomer(s) contains carboxylic acid. The compns. are especially suitable for floors, walls, and roofs, and have improved foam stability, mech. strength, resistance to water, and sound and thermal insulating properties.

IC ICM C04B024-26

ICS C04B038-00

CC 58-3 (**Cement, Concrete, and Related Building Materials**)

ST polymeric foam stabilizer slurry; mortar **cement** polymeric foam stabilizer; gypsum slurry polymeric foam stabilizer

IT **Cement**

(slurries, polymeric foam stabilizers for)

IT Foams

(stabilizers for, polymeric, manufacture of, for **cement** and gypsum slurries)

IT 25035-69-2 25035-89-6 **25085-41-0**, Acrylic acid-butyl acrylate-vinyl acetate copolymer 25230-94-8 25987-67-1 26300-51-6, Acrylic acid-butyl acrylate-methyl methacrylate copolymer 30231-50-6 136190-00-6

RL: TEM (Technical or engineered material use); USES (Uses)
(foam stabilizer, for **cement** and gypsum slurries)

IT 9008-63-3, Daxad 19 25155-19-5D, Naphthalenesulfonic acid, salts 25155-30-0, Siponate DS 4

RL: USES (Uses)
(foamed **cement** slurries containing, polymeric foam stabilizers for)

IT 39464-64-7, Wayfos M 60 57706-08-8, Aerosol A 103

RL: USES (Uses)
(surfactant, in polymeric foam stabilizer preparation, for **cement** and gypsum slurries)

IT **25085-41-0**, Acrylic acid-butyl acrylate-vinyl acetate copolymer 136190-00-6

RL: TEM (Technical or engineered material use); USES (Uses)
(foam stabilizer, for **cement** and gypsum slurries)

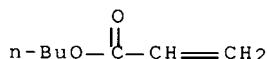
RN 25085-41-0 HCPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate and ethenyl acetate (CA INDEX NAME)

CM 1

CRN 141-32-2

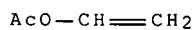
CMF C7 H12 O2



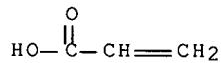
CM 2

CRN 108-05-4

CMF C4 H6 O2



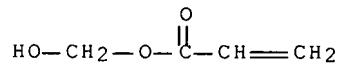
CM 3

CRN 79-10-7
CMF C3 H4 O2

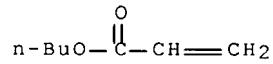
RN 136190-00-6 HCPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate, ethenyl acetate and hydroxymethyl 2-propenoate (9CI) (CA INDEX NAME)

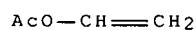
CM 1

CRN 15731-80-3
CMF C4 H6 O3

CM 2

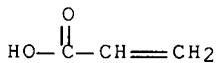
CRN 141-32-2
CMF C7 H12 O2

CM 3

CRN 108-05-4
CMF C4 H6 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2



L69 ANSWER 39 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1990:596699 HCAPLUS Full-text
 DN 113:196699
 TI Extruded **cement** products, and their manufacture
 IN Kaempfer, Wolfram; Guenther, Michael; Almeroth, Roland; Bergner, Klaus; Helff, Claus Dieter; Buechner, Ute; Eger, Kurt; Janorschke, Ulrich; Wichmann, Andreas
 PA Bauakademie der DDR, Institut fuer Baustoffe, Ger. Dem. Rep.
 SO Ger. (East), 4 pp.
 CODEN: GEXXA8
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DD 277267	A1	19900328	DD 1988-322127	19881124
PRAI	DD 1988-322127		19881124		
AB	The cement products consist of cement 52-88, micron-size reactive SiO ₂ 3-23, vinyl alc.-based (co)polymers (I) 1-3, and water 8-20 weight parts. The products are manufactured by vigorously mixing the micro-SiO ₂ with the water to give homogeneous reactive SiO ₂ , and consecutively or simultaneously adding the I and the cement . The micro-SiO ₂ may be premixed with the cement . Thus, a mixture of cement 670, reactive SiO ₂ fume 130, carboxyl-type latex containing 3% methacrylic acid 30, and plasticizer 10 weight parts, having water/ cement ratio 0.20:1, gave crack-free products, vs. crumbly material without the SiO ₂ .				
IC	ICM C04B014-00				
	ICS C04B028-00; B28B003-20				
CC	58-1 (Cement , Concrete , and Related Building Materials)				
ST	silica fume extruded cement product; polyvinyl alc cement product				
IT	Cement (products, extruded, crack-free, containing vinyl alc.-based polymers and silica fume)				
IT	79-10-7D, Acrylic acid, esters, polymers with styrene 100-42-5D, polymers with acrylic acid esters 108-05-4D, Vinyl acetate, polymers 9002-89-5D, Poly(vinyl alcohol), partially saponified				
	RL: USES (Uses) (cement mixts. containing silica fume and, for crack-free extruded products)				
IT	7631-86-9				
	RL: USES (Uses) (cement , products, extruded, crack-free, containing vinyl alc.-based polymers and silica fume)				
IT	60676-86-0, Vitreous silica				
	RL: USES (Uses) (fume, cement mixts. containing vinyl alc.-based polymers and, for crack-free extruded products)				
IT	81690-71-3, Viskoment				
	RL: MOA (Modifier or additive use); USES (Uses) (plasticizer, cement mixts. containing vinyl alc.-based polymers and silica fume and, for crack-free extruded products)				

PEZZUTO

10/551268

9/18/07

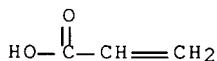
90

IT 79-10-7D, Acrylic acid, esters, polymers with styrene
 9002-89-5D, Poly(vinyl alcohol), partially saponified
 RL: USES (Uses)

(cement mixts. containing silica fume and, for crack-free
 extruded products)

RN 79-10-7 HCPLUS

CN 2-Propenoic acid (CA INDEX NAME)



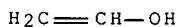
RN 9002-89-5 HCPLUS

CN Ethenol, homopolymer (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O



L69 ANSWER 40 OF 59 HCPLUS COPYRIGHT 2007 ACS on STN

AN 1990:428409 HCPLUS Full-text

DN 113:28409

TI Cement compositions with good workability

IN Yuki, Takeshi; Yamauchi, Junnosuke; Okamura, Takayuki

PA Kuraray Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02026855	A	19900129	JP 1988-175625	19880713
PRAI	JP 1988-175625				

AB The compns. contain 35-200 parts (as solid resin) emulsions consisting of acrylic resins, prepared by emulsion polymerization of ethylene and vinyl unsatd. carboxylates in the presence of acrylic emulsions (glass-transition temperature $\leq 0^\circ$, prepared by emulsion polymerization of C1-18 alkyl (meth)acrylate monomers) per 100 parts cement. The cement shows high strength and excellent water resistance. An acrylic acid-2-ethylhexyl acrylate-Me methacrylate-vinyl acetate graft copolymer was used in an example.

IC ICM C04B024-24

CC 58-1 (Cement, Concrete, and Related Building
Materials)ST cement acrylic polymer emulsion; vinyl acetate acrylate
copolymer cement; methacrylate graft copolymer cementIT Cement
(admixts., acrylic polymer additives in, for workability)IT Acrylic polymers, uses and miscellaneous
RL: USES (Uses)

(in cement compns. for workability)

IT 72108-15-7 127836-70-8

RL: USES (Uses)

(cement compns. containing, for workability)

IT 72108-15-7 127836-70-8

RL: USES (Uses)

(cement compns. containing, for workability)

RN 72108-15-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenyl acetate, 2-ethylhexyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 108-05-4

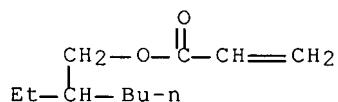
CMF C4 H6 O2



CM 2

CRN 103-11-7

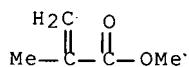
CMF C11 H20 O2



CM 3

CRN 80-62-6

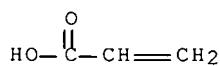
CMF C5 H8 O2



CM 4

CRN 79-10-7

CMF C3 H4 O2



PEZZUTO

10/551268

9/18/07

92

RN 127836-70-8 HCAPLUS

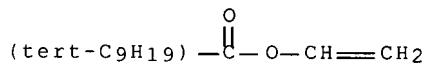
CN tert-Decanoic acid, ethenyl ester, polymer with ethenyl acetate, 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 26544-09-2

CMF C12 H22 O2

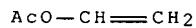
CCI IDS



CM 2

CRN 108-05-4

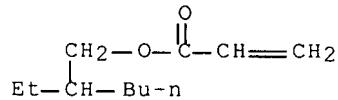
CMF C4 H6 O2



CM 3

CRN 103-11-7

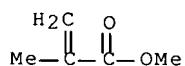
CMF C11 H20 O2



CM 4

CRN 80-62-6

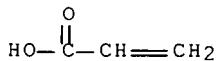
CMF C5 H8 O2



CM 5

CRN 79-10-7

CMF C3 H4 O2



L69 ANSWER 41 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1990:120806 HCAPLUS Full-text

DN 112:120806

TI Aqueous hardeners based on (meth)acrylic acid copolymers and aldehyde-phenol-polyamine adducts for epoxy resin sealants, caulking compositions, and coatings

IN Klugar, Jindrich; Lidarik, Miloslav; Snuparek, Jaromir; Hajkova, Bohuslava; Sip, Martin

PA Czech.

SO Czech., 3 pp.

CODEN: CZXXA9

DT Patent

LA Czech

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CS 260720	B1	19890112	CS 1987-2487	19870407
PRAI	CS 1987-2487		19870407		

AB Hardeners for the title use contain 100 parts 20-40% aqueous (20-60):(10-30):(20-55) C2-8 alkyl (meth)acrylate-(meth)acrylic acid-vinyl compound copolymer dispersions, 5-40 parts reaction product prepared from a 1:(0.8-1.2) (mole ratio) C1-7 aldehyde-C2-19 N2-9 (aliphatic) cycloaliph. polyamine condensates and (alkyl) phenols [amine-phenol mole ratio 1:(0.6-1.5)], and optionally, 10 parts polyamines and 30 parts water. Thus, 2 parts hardener containing 25% aqueous 25:25:50 acrylic acid-Et acrylate-styrene copolymer dispersion 100, 1:1: (mole ratio) cresol-diethylenetriamine-HCHO condensate 35, and water 20 parts was homogenized with 1 part dian epoxy resin (mol. weight 370) and 2 parts Portland cement 320 to give a thixotropic composition that exhibited good adhesion to glass and wet substrates after hardening for quick repair of water seepage.

IC ICM C08G059-50

ICS C08L063-10

CC 42-11 (Coatings, Inks, and Related Products)

Section cross-reference(s): 37, 58

IT 113921-92-9

RL: USES (Uses)

(crosslinkers, containing aldehyde-phenol-polyamine condensates and cyclohexylaminopropylamine, for epoxy resin coatings and sealants)

IT 113921-92-9

RL: USES (Uses)

(crosslinkers, containing aldehyde-phenol-polyamine condensates and cyclohexylaminopropylamine, for epoxy resin coatings and sealants)

RN 113921-92-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenyl acetate, ethenylbenzene, ethyl 2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 140-88-5

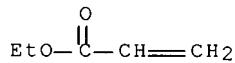
CMF C5 H8 O2

PEZZUTO

10/551268

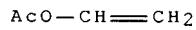
9/18/07

94



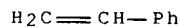
CM 2

CRN 108-05-4
CMF C4 H6 O2



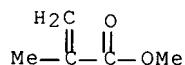
CM 3

CRN 100-42-5
CMF C8 H8



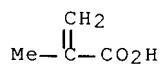
CM 4

CRN 80-62-6
CMF C5 H8 O2



CM 5

CRN 79-41-4
CMF C4 H6 O2



L69 ANSWER 42 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1989:520006 HCAPLUS Full-text
DN 111:120006
TI Waterproofing coating materials
IN Macho, Vendelin; Stepita, Matej; Pavlacka, Eduard; Beseda, Viliam; Gregor, Alexander
PA Czech.

KATHLEEN FULLER EIC1700

571/272-2505

SO Czech., 4 pp.
CODEN: CZXXA9

DT Patent
LA Slovak

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CS 256051	B1	19880415	CS 1982-5300	19851220
PRAI	CS 1982-5300		19851220		

AB The waterproofing materials consist of a hydraulic binder (**cement**, gypsum) 30-60, fillers (quartz and andesite sand, basalt fibers, microasbestos, limestone, dolomite) 35-65, cellulose derivs. or casein 2-4, Ca stearate (I), silica, and/or urea 0.5-3 weight parts, and 10-60 weight parts hydrophobic component/100 weight parts of solids. The hydrophobic component consists of an aqueous dispersion of a copolymer of vinyl chloride (II) with vinyl acetate (III), alkyl acrylates, acrylic acid, maleic acid, alkyl maleate, 1,3-butadiene, styrene, and/or α -methylstyrene, contains \leq 5% partially saponified poly(vinyl acetate) or poly(vinyl alc.) and <10-2% monomeric II. After mixing of solids with the aqueous dispersion, the material is used for coating of **concrete** surfaces pretreated with a penetration varnish and gives a smooth crack-free layer impermeable to water. A typical insulation was prepared from white **cement** 51.0, microground limestone (grain size 0.01-0.5 mm) 44.3, acid casein 2.5, microasbestos 1.5, I 0.5, hexamethylenetetramine 0.20, 50% aqueous dispersion of 72:17:11 II-III-di-Bu maleate copolymer 5, and H₂O 25 weight parts.

IC ICM C09K003-18

CC 58-3 (**Cement**, **Concrete**, and Related Building Materials)ST waterproofing vinyl chloride copolymer **cement** binder; limestone waterproofing binder **concrete**; asbestos waterproofing binder **concrete**; calcium stearate waterproofing binder **concrete**; silica waterproofing **cement** binder; urea waterproofing **cement** binderIT **Concrete**

(coatings on, waterproofing materials for, preparation of)

IT Andesite

Asbestos

Limestone, uses and miscellaneous

RL: USES (Uses)

(filler, waterproofing coating materials containing, vinyl chloride copolymer in, for **concrete**)

IT Caseins, uses and miscellaneous

RL: USES (Uses)

(waterproofing coating materials containing, vinyl chloride copolymer in, for **concrete**)

IT Waterproofing

(agents, preparation of, from **cement** and limestone and vinyl chloride-containing copolymer, for **concrete**)

IT Synthetic fibers

RL: USES (Uses)

(basalt, filler, waterproofing coating materials containing, vinyl chloride copolymer in, for **concrete**)

IT Basalt

RL: USES (Uses)

(fiber, filler, waterproofing coating materials containing, vinyl chloride copolymer in, for **concrete**)

IT Coating materials

(water-resistant, preparation of, from **cement** and limestone and vinyl chloride-containing copolymer, for **concrete**)IT **Cement**

(white, binder, waterproofing coating materials containing, vinyl chloride copolymer in, for **concrete**)

IT 13397-24-5, Gypsum, uses and miscellaneous
RL: USES (Uses)

(binder, waterproofing coating materials containing, vinyl chloride copolymer in, for **concrete**)

IT 16389-88-1, Dolomite, uses and miscellaneous
RL: USES (Uses)

(filler, waterproofing coating materials containing, vinyl chloride copolymer in, for **concrete**)

IT 9005-09-8 26590-01-2 30523-12-7 33750-59-3, Dibutyl maleate-vinyl acetate-vinyl chloride copolymer **41934-30-9**
RL: USES (Uses)

(waterproofing coating materials containing, for **concrete**)

IT 57-13-6, Urea, uses and miscellaneous 100-97-0, uses and miscellaneous 1592-23-0, Calcium stearate 7631-86-9, Silica, uses and miscellaneous 9003-20-7D, partially saponified
RL: USES (Uses)

(waterproofing coating materials containing, vinyl chloride copolymer in, for **concrete**)

IT **41934-30-9**
RL: USES (Uses)

(waterproofing coating materials containing, for **concrete**)

RN 41934-30-9 HCAPLUS

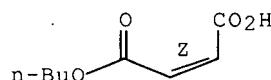
CN 2-Butenedioic acid (2Z)-, monobutyl ester, polymer with chloroethene and ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 925-21-3

CMF C8 H12 O4

Double bond geometry as shown.



CM 2

CRN 108-05-4

CMF C4 H6 O2



CM 3

CRN 75-01-4

CMF C2 H3 Cl

H2C=CH-Cl

L69 ANSWER 43 OF 59 HCPLUS COPYRIGHT 2007 ACS on STN
 AN 1989:198241 HCPLUS Full-text
 DN 110:198241
 TI Plastering mix
 IN Deja, Jan; Derdacka-Grzymek, Anna; Lorecki, Jerzy; Malolepszy, Jan;
 Stabrawa, Stefan; Stok, Andrzej

PA Akademia Gorniczo-Hutnicza, Pol.

SO Pol., 9 pp.

CODEN: POXXA7

DT Patent

LA Polish

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	PL 144935	B1	19880730	PL 1985-255475	19850920
PRAI	PL 1985-255475		19850920		

AB The plastering mix consists of colored slag binder 20-25, polymer binder 2-2.5, filler 60-70% and H₂O 100-120 weight %. The colored binder has sp. surface of 3200 cm²/g and comprises granulated blast-furnace slag 90-96, portland clinker 4-6, and color additive ≤4 weight %. The product can be easily manufactured in a wide range of uniform colors, and has a low thermal conductivity

IC ICM C04B028-00

CC 58-3 (Cement, Concrete, and Related Building Materials)

IT Cement

(portland, plastering mix, containing, colored)

IT 9003-20-7, Polyvinyl acetate 31546-73-3, Poly(vinyl maleate)

RL: USES (Uses)

(aqueous suspension of, in plastering mix)

IT 31546-73-3, Poly(vinyl maleate)

RL: USES (Uses)

(aqueous suspension of, in plastering mix)

RN 31546-73-3 HCPLUS

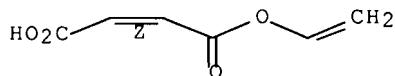
CN 2-Butenedioic acid (2Z)-, monoethenyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 19896-47-0

CMF C6 H6 O4

Double bond geometry as shown.



L69 ANSWER 44 OF 59 HCPLUS COPYRIGHT 2007 ACS on STN
 AN 1989:140523 HCPLUS Full-text
 DN 110:140523

TI Agents for decreasing dust and rebounds in spray application of **concretes**

IN Mihara, Toshio; Nakajima, Nobuyoshi; Hirano, Kenichi; Kawauchi, Toshio

PA Denki Kagaku Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 63270334	A	19881108	JP 1987-103097	19870428
PRAI JP 1987-103097		19870428		

AB The agents contain copolymer emulsion of ethylene, vinyl acetate, unsatd. carboxylic acids, and acrylates. Thus, acrylic acid-Bu acrylate-ethylene-vinyl acetate copolymer emulsion was added to a **concrete** mixture just before spray application. A **concrete** product having 28-day compressive strength 260 kg/mm² was obtained with 9% rebound and 230 dust counts per min. A **concrete** mixture free of the agent gave a product having 28-day compressive strength 250 kg/mm² with 35% rebound and 764 dust counts per min.

IC ICM C04B024-26

ICS C08L023-08; C08L031-04; C08L033-08

CC 58-2 (**Cement, Concrete, and Related Building Materials**)

ST dust decreasing agent **concrete** spraying; rebound prevention agent **concrete** spraying; ethylene copolymer spray **concrete** additive; acrylate copolymer spray **concrete** additive; vinyl acetate copolymer **concrete** additive

IT **Concrete**

(additives, for dust and rebound prevention, carboxylic acid-vinyl acetate copolymers as, for spraying)

IT Dust

(prevention agents for, acrylate-ethylene-unsatd. carboxylic acid-vinyl acetate copolymers as, in **concretes** for spray application)

IT 28679-42-7 28679-45-0, Acrylic acid-butyl acrylate-ethylene-vinyl acetate copolymer 119779-53-2
119791-01-4

RL: USES (Uses)

(**concrete** additive, spray, for rebound and dusting prevention)

IT 28679-42-7 28679-45-0, Acrylic acid-butyl acrylate-ethylene-vinyl acetate copolymer 119779-53-2
119791-01-4

RL: USES (Uses)

(**concrete** additive, spray, for rebound and dusting prevention)

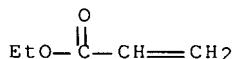
RN 28679-42-7 HCPLUS

CN 2-Propenoic acid, polymer with ethene, ethenyl acetate and ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 140-88-5

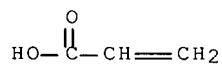
CMF C5 H8 O2



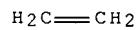
CM 2

CRN 108-05-4
CMF C4 H6 O2

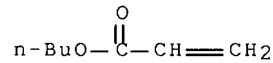
CM 3

CRN 79-10-7
CMF C3 H4 O2

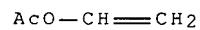
CM 4

CRN 74-85-1
CMF C2 H4RN 28679-45-0 HCPLUS
CN 2-Propenoic acid, polymer with butyl 2-propenoate, ethene and ethenyl acetate (CA INDEX NAME)

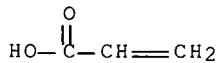
CM 1

CRN 141-32-2
CMF C7 H12 O2

CM 2

CRN 108-05-4
CMF C4 H6 O2

CM 3

CRN 79-10-7
CMF C3 H4 O2

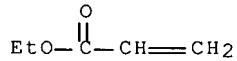
CM 4

CRN 74-85-1
CMF C2 H4

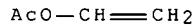
RN 119779-53-2 HCPLUS

CN Butanedioic acid, methylene-, polymer with ethene, ethenyl acetate and ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

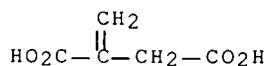
CRN 140-88-5
CMF C5 H8 O2

CM 2

CRN 108-05-4
CMF C4 H6 O2

CM 3

CRN 97-65-4
CMF C5 H6 O4

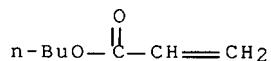


CM 4

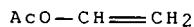
CRN 74-85-1
CMF C2 H4

RN 119791-01-4 HCPLUS
 CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate, ethene and
 ethenyl acetate (9CI) (CA INDEX NAME)

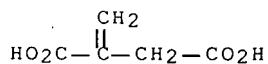
CM 1

CRN 141-32-2
CMF C7 H12 O2

CM 2

CRN 108-05-4
CMF C4 H6 O2

CM 3

CRN 97-65-4
CMF C5 H6 O4

CM 4

CRN 74-85-1
CMF C2 H4



L69 ANSWER 45 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1989:62650 HCAPLUS Full-text

DN 110:62650

TI (Meth)acrylate polymer dispersing agents for **cement**

IN Yamaguchi, Koichi; Goto, Tokio

PA Dainippon Ink Chemical Industry Co., Japan

SO Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 273711	A1	19880706	EP 1987-311381	19871223
	R: BE, DE, FR, GB, IT, NL				
	JP 63162563	A	19880706	JP 1986-307983	19861225
	US 4888059	A	19891219	US 1987-136344	19871222
PRAI	JP 1986-307983	A	19861225		
AB	A cement dispersing agent is obtained by copolymg. 40-90 weight% (meth)acrylic acid and/or their alkali metal salts with 10-60 weight% Me and/or Et (meth)acrylate. Alternatively, the cement dispersing agent comprises copolymer obtained by copolymg. 40-89 weight% (meth)acrylic acid and/or their alkali metal salts with 10-51 weight% Me and/or Et (meth)acrylate to which 1-9 weight% of other copolymerizable unsatd. monomer, chosen to balance the hydrophilic and hydrophobic natures of the resulting copolymers, is added, in an aqueous medium. When used in small amts. (about 0.01-1.00 weight%) at the time of mixing of cements , the cement dispersing agents impart excellent fluidity, prevent slump loss, and quickly develop strength in the cured products. They are also advantageous from the standpoint of no pollution and economics. The compressive strength and fluidity (shown by a "mortar flow value") of cements containing 0.6% 75:25 methacrylic acid-Me methacrylate copolymer were measured for various weight average mol. wts. of the copolymer. The highest fluidity and the highest 7- and 28-day compressive strengths were achieved when the weight average mol. weight of the cement dispersing agent was .apprx.20,000, and all the measured values decreased rapidly for copolymer weight average mol. wts. of <10,000 and >40,000.				
IC	ICM C04B024-26				
	ICS C08F220-18; C08F020-18				
CC	58-1 (Cement , Concrete , and Related Building Materials)				
	Section cross-reference(s): 38				
ST	copolymer dispersing agent cement ; acrylic acid copolymer dispersant; methacrylic acid copolymer dispersant; acrylate copolymer dispersant; methacrylate copolymer dispersant				
IT	Dispersing agents				
	((meth)acrylic polymers, for cement for fluidity and early strength)				
IT	Cement				
	(dispersing agents for, (meth)acrylic polymers, for fluidity and early strength)				
IT	25086-15-1, Methacrylic acid-methyl methacrylate copolymer			26950-79-8,	
	Methacrylic acid-methyl methacrylate copolymer sodium salt			41487-53-0,	
	Ethyl acrylate-methacrylic acid copolymer sodium salt			51822-19-6,	

Acrylic acid-ethyl acrylate copolymer sodium salt 54452-24-3
72728-47-3, Methacrylic acid-methyl methacrylate-vinyl acetate copolymer sodium salt 79281-92-8 93891-16-8 118570-03-9
 118570-05-1 118570-07-3

RL: TEM (Technical or engineered material use); USES (Uses)
 (dispersing agents, for **cement**, for fluidity and early strength)

IT **72728-47-3**, Methacrylic acid-methyl methacrylate-vinyl acetate copolymer sodium salt

RL: TEM (Technical or engineered material use); USES (Uses)
 (dispersing agents, for **cement**, for fluidity and early strength)

RN 72728-47-3 HCPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenyl acetate and methyl 2-methyl-2-propenoate, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 28430-58-2

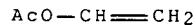
CMF (C5 H8 O2 . C4 H6 O2 . C4 H6 O2)x

CCI PMS

CM 2

CRN 108-05-4

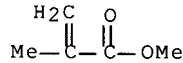
CMF C4 H6 O2



CM 3

CRN 80-62-6

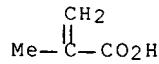
CMF C5 H8 O2



CM 4

CRN 79-41-4

CMF C4 H6 O2



DN 109:215121

TI **Cement** composition with high bondability and low water absorption

IN Tanaka, Yasuji; Nakakita, Masanobu; Harada, Akio

PA Showa Highpolymer Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63144155	A	19880616	JP 1986-287684	19861204
	JP 02048503	B	19901025		
PRAI	JP 1986-287684		19861204		

AB The title **cement** composition contains a synthetic resin aqueous emulsion containing 10-65 weight% solids comprising ethylene 1-50, vinyl acetate and vinyl ester (vinyl acetate/vinyl ester = 0-2) 30-95, and styrene monomer (s), acrylic ester monomer (a), and other monomer (m) copolymerizable with s and a $[m/(s+a) = 0-1, s/a = 0-10]$ 5-70 weight%, which is prepared by 2-stage polymerization. Thus, a powdered mixture of **cement** 100, sand 100, and Hi-Metolose 90SH4000 0.2 part was mixed with 20 parts aqueous emulsion of Bu acrylate-ethylene-styrene-vinyl acetate copolymer and 50 parts water to prepare a mortar of bonding strength 6.5 kg/cm² and water absorption 0.42 g/49 cm², resp.

IC ICM C04B024-26

ICS C08L051-06

CC 58-1 (**Cement, Concrete, and Related Building Materials**)ST polymer emulsion **cement** mortar; ethylene vinyl ester copolymer **cement**IT **Cement**

(additives for, ethylene-vinyl ester-styrene-acrylate copolymers, for good bonding and low water absorption)

IT Fatty acids, esters

RL: USES (Uses)

(branched, vinyl esters, polymers, with Bu acrylate, ethylene, styrene, and vinyl acetate, emulsions, **cement** compns. containing, for good bonding and low water absorption)

IT 96538-32-8

RL: USES (Uses)

(**cement** compns. containing, polymer emulsion in, for good bonding and low water absorption)

IT 74-85-1D, polymers with Bu acrylate, styrene, vinyl acetate, and vinyl versatate 100-42-5D, polymer with Bu acrylate, ethylene, vinyl acetate, and vinyl versatate 108-05-4D, polymer with Bu acrylate, ethylene, styrene, and vinyl versatate 141-32-2D, polymer with ethylene, styrene, vinyl acetate, and vinyl versatate 81666-28-6, Butyl acrylate-ethylene-styrene-vinyl acetate copolymer 117533-20-7

RL: USES (Uses)

(emulsion, **cement** compns. containing, for good bonding and low water absorption)

IT 117533-20-7

RL: USES (Uses)

(emulsion, **cement** compns. containing, for good bonding and low water absorption)

RN 117533-20-7 HCPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethene, ethenyl acetate and ethenylbenzene (9CI) (CA INDEX NAME)

PEZZUTO

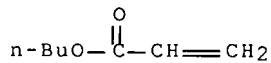
10/551268

9/18/07

105

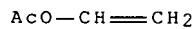
CM 1

CRN 141-32-2
CMF C7 H12 O2



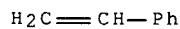
CM 2

CRN 108-05-4
CMF C4 H6 O2



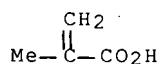
CM 3

CRN 100-42-5
CMF C8 H8



CM 4

CRN 79-41-4
CMF C4 H6 O2



CM 5

CRN 74-85-1
CMF C2 H4



L69 ANSWER 47 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1988:80871 HCAPLUS Full-text

KATHLEEN FULLER EIC1700

571/272-2505

DN 108:80871

TI **Cement** plasticizer compositions based on polymerizable carboxylic acids, and cementiferous compositions containing them

IN Hoarty, John Terence; Bainbridge, Peter; Montague, Peter Graham

PA UK

SO Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 244095	A2	19871104	EP 1987-302851	19870401
	EP 244095	A3	19890726		
	EP 244095	B1	19951018		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE				
	CA 1325863	C	19940104	CA 1987-533258	19870330
	AU 8770910	A	19871008	AU 1987-70910	19870331
	AU 602682	B2	19901025		
	AT 129224	T	19951115	AT 1987-302851	19870401
	ES 2079347	T3	19960116	ES 1987-302851	19870401
	ZA 8702400	A	19881228	ZA 1987-2400	19870402
	JP 63079744	A	19880409	JP 1987-82780	19870403
	US 5047087	A	19910910	US 1989-348847	19890504

PRAI US 1986-847983 A 19860403

AB **Cement** plasticizers and **cement** compns. containing these are prepared, wherein the plasticizers are copolymers and their salts and comprise approx. 33-95 mol% of an ethylenically polymerizable carboxylic acid and 5-67 mol% of a C1-8 alkyl ester of an ethylenically polymerizable carboxylic acid or, optionally, terpolymers of 45-90 mol% of said acid, 5-50 mol% of said ester, and 5-50 mol% of a 3rd monomer preferably selected from the group comprising vinyl acetate, allyl alc., vinyl alc., and styrene. Acrylic acid is the ethylenically polymerizable carboxylic acid in 6 of 7 polymers tested, methacrylic acid is used in the 7th, and all polymers are in the form of the Na salt. The plasticizer compns. also may contain 0.1-2.0 weight% antifoaming agent and 15-35 weight% accelerator, both based on the copolymer. A plasticizer was prepared from acrylic acid 56, Me methacrylate 22, and vinyl acetate 22 mol% in the form of the Na salt and added to **concrete** at 0.12 weight% (based on **cement**) along with 0.25 weight% Bu₃PO₄ antifoaming agent. The **concrete** had plastic d. 2400, flow 34 and 63 before and after tamping, setting time 7.7 and 9.0 h at 500 and 1000 psi, resp., time to return to 50 mm slump 3.60 h, and 1- and 7-day compressive strength 11.0 and 36.0 N/mm² vs. 2410, 36 and 64, 7.2 and 9.4 h, 3.75 h, and 9.5 and 35.5 N/mm², resp. for **concrete** containing the more expensive acrylic acid-hydroxypropyl methacrylate copolymer Na salt as the plasticizer.

IC ICM C04B024-26

CC 58-1 (**Cement**, **Concrete**, and Related Building Materials)ST polymer sodium salt **cement** plasticizer; methacrylic acid copolymer plasticizer; acrylic acid copolymer plasticizer; methacrylate copolymer plasticizer; acrylate copolymer plasticizer; vinyl alc copolymer plasticizer; vinyl acetate copolymer plasticizer; allyl alc copolymer plasticizer; styrene copolymer plasticizer

IT Alcohols, uses and miscellaneous

Siloxanes and Silicones, uses and miscellaneous

RL: USES (Uses)

(antifoaming agent, in **cement** compns. containing (meth)acrylic copolymer sodium salt plasticizers)

IT Antifoaming agents

(in **cement** compns. containing (meth)acrylic copolymer sodium salt

plasticizers)

IT **Cement**
Concrete
 (plasticizers for, (meth)acrylic copolymer sodium salts)

IT 84-74-2 126-73-8, Tributyl phosphate, uses and miscellaneous
 RL: USES (Uses)
 (antifoaming agent, in **cement** compns. containing (meth)acrylic copolymer sodium salt plasticizers)

IT 26950-79-8, Methacrylic acidmethyl methacrylate copolymer sodium salt
 51822-19-6, Acrylic acid-ethyl acrylate copolymer sodium salt 55618-96-7
 57208-39-6, Acrylic acid-methyl methacrylate copolymer sodium salt
 112665-50-6 **112665-51-7** 112665-52-8
 RL: TEM (Technical or engineered material use); USES (Uses)
 (plasticizer, for **concrete**)

IT 79-10-7D, derivs., polymers, sodium salts
 RL: TEM (Technical or engineered material use); USES (Uses)
 (plasticizers, for **concrete**)

IT 102-71-6, uses and miscellaneous 540-72-7, Sodium thiocyanate
 RL: USES (Uses)
 (setting accelerator, in **cement** compns. containing (meth)acrylic copolymer sodium salt plasticizers)

IT **112665-51-7**
 RL: TEM (Technical or engineered material use); USES (Uses)
 (plasticizer, for **concrete**)

RN 112665-51-7 HCPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenyl acetate and 2-propenoic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 25767-83-3
 CMF (C₅ H₈ O₂ . C₄ H₆ O₂ . C₃ H₄ O₂)_x
 CCI PMS

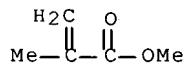
CM 2

CRN 108-05-4
 CMF C₄ H₆ O₂

AcO—CH=CH₂

CM 3

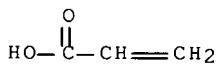
CRN 80-62-6
 CMF C₅ H₈ O₂



CM 4

CRN 79-10-7

CMF C3 H4 O2



L69 ANSWER 48 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1987:604070 HCAPLUS Full-text

DN 107:204070

TI Protective compositions for **cement** products

IN Goto, Tokio

PA Dainippon Ink and Chemicals, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

PI JP 62138374	A	19870622	JP 1985-275973	19851210
----------------	---	----------	----------------	----------

PRAI JP 1985-275973		19851210
---------------------	--	----------

AB The protective compns. for **cement** products comprise (1) aqueous dispersion of synthetic resin prepared by emulsion polymerization of versatic acid vinyl ester 30-100 and other vinyl monomers 0-70 weight% and (2) Li silicate. Thus, a **cement** mortar was coated with an aqueous solution containing VeoVa 10-ethylhexyl acrylate-methacrylic acid-Me methacrylate copolymer and Lithium Silicate-45 (SiO₂/Li₂O mol ratio 3.5) at 200 g/m², dried 1 wk at 23° and 65% relative humidity, and dipped 1 h in tap water. The water absorption was 1.0 vs. 8.7% for untreated mortar.

IC ICM C04B040-04

CC 58-3 (**Cement, Concrete, and Related Building Materials**)

IT Coating materials

(versatic acid vinyl ester base polymer-lithium silicate, for **cement** product protection)

IT 12627-14-4 111287-16-2, Ethylhexyl acrylate-methacrylic acid-methyl methacrylate-VeoVa 10 copolymer

RL: USES (Uses)

(protective composition containing, for **cement** products)

IT 111287-16-2, Ethylhexyl acrylate-methacrylic acid-methyl methacrylate-VeoVa 10 copolymer

RL: USES (Uses)

(protective composition containing, for **cement** products)

RN 111287-16-2 HCAPLUS

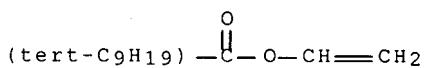
CN tert-Decanoic acid, ethenyl ester, polymer with 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

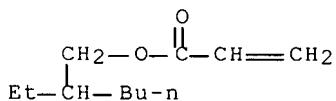
CRN 26544-09-2

CMF C12 H22 O2

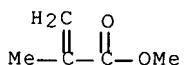
CCI IDS



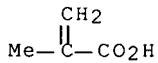
CM 2

CRN 103-11-7
CMF C11 H20 O2

CM 3

CRN 80-62-6
CMF C5 H8 O2

CM 4

CRN 79-41-4
CMF C4 H6 O2

L69 ANSWER 49 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1987:560487 HCAPLUS Full-text
 DN 107:160487
 TI Water-soluble polymers and their use as a construction material in the
 building industry
 IN Lange, Werner; Hoehl, Frank; Szablikowski, Klaus
 PA Wolff Walsrode A.-G., Fed. Rep. Ger.
 SO Ger. Offen., 8 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1
 PATENT NO. KIND DATE APPLICATION NO. DATE
 ----- ----- ----- -----
 PI DE 3545596 A1 19870625 DE 1985-3545596 19851221

EP 227984	A1	19870708	EP 1986-117020	19861208
EP 227984	B1	19890531		
R: DE, FR, IT				
US 4703087	A	19871027	US 1986-942142	19861216
PRAI DE 1985-3545596	A	19851221		

AB The water-soluble copolymers consist of (CH₂CR₁R₂) 5-50, (CH₂CHO₂CR₃) 0-20, (CH₂CR₄CONH₂) (I) 5-50, (CH₂CHNR₅COR₆) or (CH₂CHX) 5-50, and (CH₂CR₇CO₂H) 2-50 mol. % (R₁, R₄, R₇ = H, Me; R₂ = C₁-4 alkoxy carbonyl, C₁-4 alkanoyloxy, C₂-3 β-hydroxy alkoxy carbonyl; R₃ = H, Et; R₅, R₆ = (independently) H, Me, Et, or (jointly) (CH₂)₃ or (CH₂)₅ ring; X = imidazole or carbazole), to a total of 100%, and are contacted with lower, aliphatic aldehydes and with NaHSO₃, to convert 0.1-1 mol of I with aldehyde. They are useful in the construction of floors. A polymer was prepared consisting of Me acrylate 15, vinyl acetate 7, acrylamide 46, 1-vinylpyrrolidone-2 24, and acrylic acid 8 mol. %. The chain length was controlled by addition of hydroquinone and the polymerization was initiated and maintained by addns. of K₂S₂O₈. The pH was adjusted to 9.2 with NaOH and H₂SO₄ and the polymer was converted with HCOH in the presence of NaHSO₃. A mixture of sand, **cement** and fly ash was dry-mixed and then mixed with the polymer solution, defoamer and water. The spreading capability was measured as a function of the diameter of a given amount. The mixture required 128 mL H₂O, the initial and 1-h spreading were 235 and 240 mL, the mixture was easy to liquefy after 1 h, and produced a smooth and walkable surface, whereas a com. melamine-formaldehyde required 118 mL water, the spreading was 230 and 160 mL, resp., and the surface was bulging and uneven but walkable.

IC ICM C08F008-36

ICS C08F008-28; C08F218-08; C08F220-06; C08F220-12; C08F220-56; C08F226-06; C04B024-24

CC 58-6 (**Cement, Concrete, and Related Building Materials**)

ST water soluble flowing agent **cement**; acrylic acid deriv flowing agent; floor construction flowing agent **cement**

IT **Cement**

Concrete

 (acrylic acid-based flowing agents for, for floors)

IT Floors

 (**cement** and **concrete**, acrylic acid-based flowing agents for)

IT Ashes (residues)

 (fly, **cement** containing acrylic acid-based flowing agents and, for floors)

IT 110586-31-7 110586-32-8 110586-33-9, Acrylic acid-acrylamide-ethyl acrylate-formaldehyde-vinyl acetate-N-vinyl-N-methylacetamide copolymer 110586-34-0 110604-03-0 110608-48-5

 RL: TEM (Technical or engineered material use); USES (Uses)

 (flowing agent, water-soluble, for **cement** and **concrete** floors)

IT 110586-31-7 110586-32-8 110586-33-9, Acrylic acid-acrylamide-ethyl acrylate-formaldehyde-vinyl acetate-N-vinyl-N-methylacetamide copolymer 110586-34-0

 RL: TEM (Technical or engineered material use); USES (Uses)

 (flowing agent, water-soluble, for **cement** and **concrete** floors)

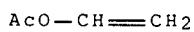
RN 110586-31-7 HCPLUS

CN 2-Propenoic acid, polymer with ethenyl acetate, 1-ethenyl-2-pyrrolidinone, formaldehyde, methyl 2-propenoate and 2-propenamide (9CI) (CA INDEX NAME)

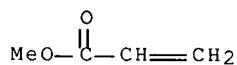
CM 1

CRN 108-05-4

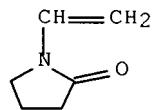
CMF C4 H6 O2



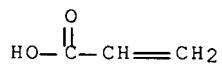
CM 2

CRN 96-33-3
CMF C4 H6 O2

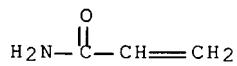
CM 3

CRN 88-12-0
CMF C6 H9 N O

CM 4

CRN 79-10-7
CMF C3 H4 O2

CM 5

CRN 79-06-1
CMF C3 H5 N O

CM 6

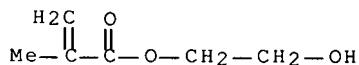
CRN 50-00-0
CMF C H2 O



RN 110586-32-8 HCPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ethenyl acetate, 1-ethenyl-2-pyrrolidinone, formaldehyde, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

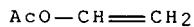
CM 1

CRN 868-77-9
CMF C6 H10 O3



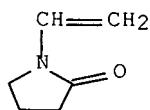
CM 2

CRN 108-05-4
CMF C4 H6 O2



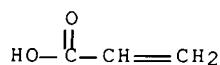
CM 3

CRN 88-12-0
CMF C6 H9 N O

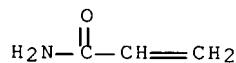


CM 4

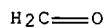
CRN 79-10-7
CMF C3 H4 O2



CM 5

CRN 79-06-1
CMF C3 H5 N O

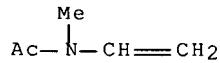
CM 6

CRN 50-00-0
CMF C H2 O

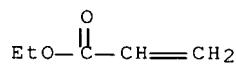
RN 110586-33-9 HCPLUS

CN 2-Propenoic acid, polymer with ethenyl acetate, N-ethenyl-N-methylacetamide, ethyl 2-propenoate, formaldehyde and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 3195-78-6
CMF C5 H9 N O

CM 2

CRN 140-88-5
CMF C5 H8 O2

CM 3

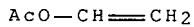
PEZZUTO

10/551268

9/18/07

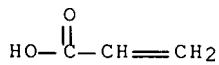
114

CRN 108-05-4
CMF C4 H6 O2



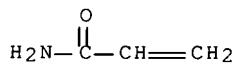
CM 4

CRN 79-10-7
CMF C3 H4 O2



CM 5

CRN 79-06-1
CMF C3 H5 N O



CM 6

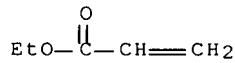
CRN 50-00-0
CMF C H2 O



RN 110586-34-0 HCAPLUS
CN 2-Propenoic acid, polymer with ethenyl acetate, 1-ethenyl-2-pyrrolidinone, ethyl 2-propenoate and formaldehyde (9CI) (CA INDEX NAME)

CM 1

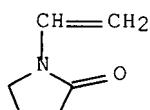
CRN 140-88-5
CMF C5 H8 O2



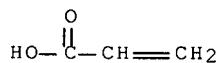
CM 2

CRN 108-05-4
CMF C4 H6 O2

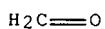
CM 3

CRN 88-12-0
CMF C6 H9 N O

CM 4

CRN 79-10-7
CMF C3 H4 O2

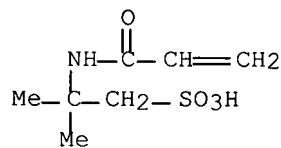
CM 5

CRN 50-00-0
CMF C H2 O

L69 ANSWER 50 OF 59 HCPLUS COPYRIGHT 2007 ACS on STN
AN 1987:181653 HCPLUS Full-text
DN 106:181653
TI Synthesis of water-soluble copolymers and building materials containing them
IN Lange, Werner; Hoehl, Frank; Szablikowski, Klaus
PA Wolff Walsrode A.-G., Fed. Rep. Ger.
SO Ger. Offen., 10 pp.
CODEN: GWXXBX
DT Patent
LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3529095	A1	19870219	DE 1985-3529095	19850814
	EP 214454	A2	19870318	EP 1986-110675	19860801
	EP 214454	A3	19870616		
	EP 214454	B1	19890405		
	R: AT, DE, FR, IT, NL				
	AT 41940	T	19890415	AT 1986-110675	19860801
	US 4727116	A	19880223	US 1986-893126	19860804
	CA 1273741	A1	19900904	CA 1986-515739	19860812
PRAI	DE 1985-3529095	A	19850814		
	EP 1986-110675	A	19860801		
AB	New, water-soluble copolymers based on acrylic acid derivs. are prepared and used in building materials, especially as plasticizers in self-leveling flooring compns. A copolymer was prepared having the composition Et acrylate 15, vinyl acetate 7, a acrylamide 36, 1-vinyl-2-pyrrolidone 24, acrylic acid 8, and 2-acrylamido-2-methylpropane Na sulfonate 10 mol%. Flooring compns. were prepared from portland cement PZ 35 175, fly ash 175, and sand with particle size 0-2 mm 725 g with addition of 0.1 SB 2030S defoaming agent and 0.2 weight% of the copolymer. The water consumption was 129 mL, the amount of spreading was 250 initially and 265 mL after 1 h at which time the mix was easily made plastic by stirring and flowed to a smooth finish without sedimentation compared to 140 mL consumption, 165 and 165 mL spread, and leaving a nonflowing mix which gave an uneven surface and pronounced depressions when a conventional melamine-HCHO condensate was used.				
IC	ICM C08F220-56				
	ICS C08F226-10; C08F220-06; C08F220-12; C08F226-06; C08F226-08; C04B024-24				
CC	58-4 (Cement, Concrete, and Related Building Materials)				
	Section cross-reference(s): 37				
IT	Cement (flooring compns., self-leveling, containing acrylic copolymer plasticizers for smoothness)				
IT	107807-73-8 107807-74-9 107807-75-0				
	107807-76-1 107807-77-2 107807-78-3				
	107807-79-4 107826-38-0 107853-79-2 107853-80-5				
	108090-90-0				
	RL: TEM (Technical or engineered material use); USES (Uses) (plasticizer, in self-leveling flooring compns. for smoothness)				
IT	107807-73-8 107807-74-9 107807-75-0				
	107807-76-1 107807-77-2 107807-78-3				
	107853-80-5 108090-90-0				
	RL: TEM (Technical or engineered material use); USES (Uses) (plasticizer, in self-leveling flooring compns. for smoothness)				
RN	107807-73-8 HCPLUS				
CN	2-Propenoic acid, polymer with ethenyl acetate, 1-ethenyl-2-pyrrolidinone, ethyl 2-propenoate, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt and 2-propenamide (9CI) (CA INDEX NAME)				
	CM 1				
	CRN 5165-97-9				
	CMF C7 H13 N O4 S . Na				



● Na

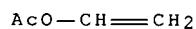
CM 2

CRN 140-88-5
CMF C5 H8 O2



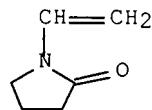
CM 3

CRN 108-05-4
CMF C4 H6 O2



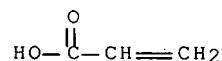
CM 4

CRN 88-12-0
CMF C6 H9 N O

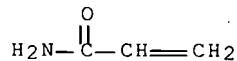


CM 5

CRN 79-10-7
CMF C3 H4 O2

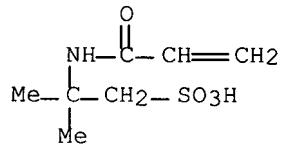


CM 6

CRN 79-06-1
CMF C3 H5 N O

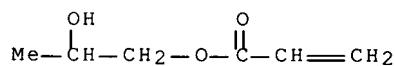
RN 107807-74-9 HCAPLUS
 CN 2-Propenoic acid, polymer with ethenyl acetate, 1-ethenyl-2-pyrrolidinone, 2-hydroxypropyl 2-propenoate, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

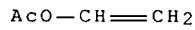
CRN 5165-97-9
CMF C7 H13 N O4 S . Na

● Na

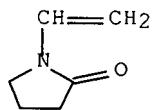
CM 2

CRN 999-61-1
CMF C6 H10 O3

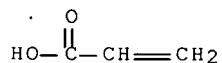
CM 3

CRN 108-05-4
CMF C4 H6 O2

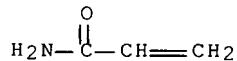
CM 4

CRN 88-12-0
CMF C6 H9 N O

CM 5

CRN 79-10-7
CMF C3 H4 O2

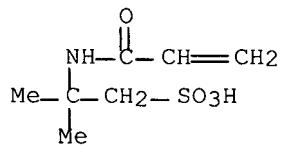
CM 6

CRN 79-06-1
CMF C3 H5 N O

RN 107807-75-0 HCPLUS

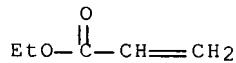
CN 2-Propenoic acid, 2-methyl-, polymer with ethenyl acetate,
1-ethenyl-2-pyrrolidinone, ethyl 2-propenoate, 2-methyl-2-[(1-oxo-2-
propenyl)amino]-1-propanesulfonic acid monosodium salt and 2-propenamide
(9CI) (CA INDEX NAME)

CM 1

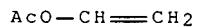
CRN 5165-97-9
CMF C7 H13 N O4 S . Na

● Na

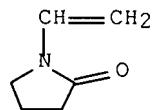
CM 2

CRN 140-88-5
CMF C5 H8 O2

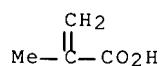
CM 3

CRN 108-05-4
CMF C4 H6 O2

CM 4

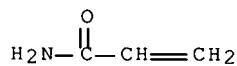
CRN 88-12-0
CMF C6 H9 N O

CM 5

CRN 79-41-4
CMF C4 H6 O2

CM 6

CRN 79-06-1
CMF C3 H5 N O



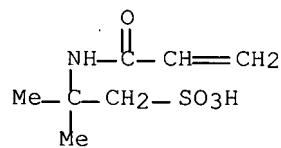
RN 107807-76-1 HCPLUS

CN 2-Propenoic acid, polymer with ethenyl acetate, 1-ethenyl-2-pyrrolidinone, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt, methyl 2-propenoate and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

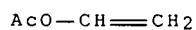


● Na

CM 2

CRN 108-05-4

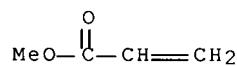
CMF C4 H6 O2



CM 3

CRN 96-33-3

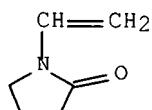
CMF C4 H6 O2



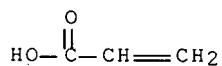
CM 4

CRN 88-12-0

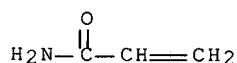
CMF C6 H9 N O



CM 5

CRN 79-10-7
CMF C3 H4 O2

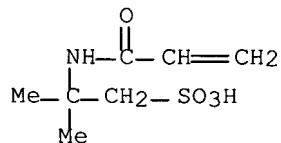
CM 6

CRN 79-06-1
CMF C3 H5 N O

RN 107807-77-2 HCPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with ethenyl acetate, 1-ethenyl-2-pyrrolidinone, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

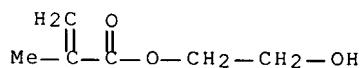
CM 1

CRN 5165-97-9
CMF C7 H13 N O4 S . Na

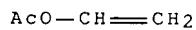
● Na

CM 2

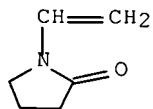
CRN 868-77-9
CMF C6 H10 O3



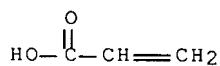
CM 3

CRN 108-05-4
CMF C4 H6 O2

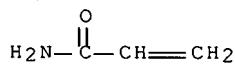
CM 4

CRN 88-12-0
CMF C6 H9 N O

CM 5

CRN 79-10-7
CMF C3 H4 O2

CM 6

CRN 79-06-1
CMF C3 H5 N O

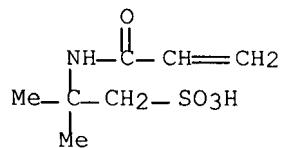
RN 107807-78-3 HCAPLUS
 CN 2-Propenoic acid, polymer with ethenyl acetate, 1-ethenyl-2-pyrrolidinone, 2-hydroxyethyl 2-propenoate, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-

propanesulfonic acid monosodium salt and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

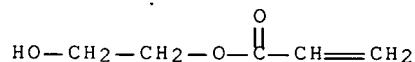


● Na

CM 2

CRN 818-61-1

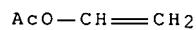
CMF C5 H8 O3



CM 3

CRN 108-05-4

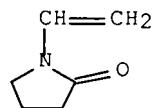
CMF C4 H6 O2



CM 4

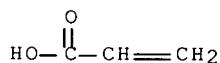
CRN 88-12-0

CMF C6 H9 N O



CM 5

CRN 79-10-7
CMF C3 H4 O2



CM 6

CRN 79-06-1
CMF C3 H5 N O

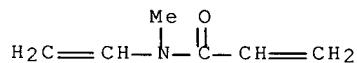


RN 107853-80-5 HCAPLUS

CN 2-Propenoic acid, polymer with ethenyl acetate, N-ethenyl-N-methyl-2-propenamide, ethyl 2-propenoate, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt and 2-propenamide (9CI) (CA INDEX NAME)

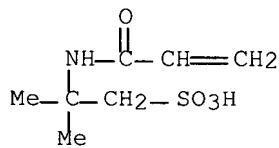
CM 1

CRN 44642-58-2
CMF C6 H9 N O



CM 2

CRN 5165-97-9
CMF C7 H13 N O4 S . Na



● Na

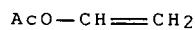
CM 3

CRN 140-88-5
CMF C5 H8 O2



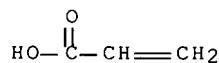
CM 4

CRN 108-05-4
CMF C4 H6 O2



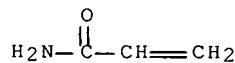
CM 5

CRN 79-10-7
CMF C3 H4 O2



CM 6

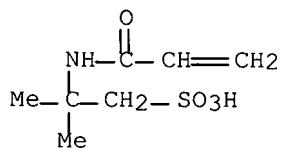
CRN 79-06-1
CMF C3 H5 N O



RN 108090-90-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxypropyl ester, polymer with ethenyl acetate, 1-ethenyl-2-pyrrolidinone, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

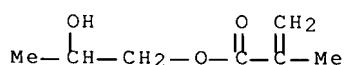
CRN 5165-97-9
CMF C7 H13 N O4 S . Na



● Na

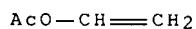
CM 2

CRN 923-26-2
CMF C7 H12 O3



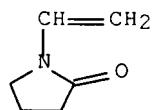
CM 3

CRN 108-05-4
CMF C4 H6 O2



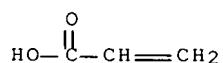
CM 4

CRN 88-12-0
CMF C6 H9 N O

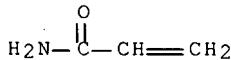


CM 5

CRN 79-10-7
CMF C3 H4 O2



CM 6

CRN 79-06-1
CMF C3 H5 N O

L69 ANSWER 51 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1987:120961 HCAPLUS Full-text
 DN 106:120961
 TI Freezeproof adhesive agent
 IN Nowak, Dominik; Halaburdo, Norbert; Wojtal, Henryk; Pepera, Marian;
 Wegrzyn, Krzysztof; Kosno, Czeslaw
 PA Instytut Ciezkiej Syntezy Organicznej "Blachownia", Pol.
 SO Pol., 3 pp.
 CODEN: POXXA7

DT Patent
 LA Polish

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	PL 126283	B1	19830730	PL 1980-222958	19800322
PRAI	PL 1980-222958		19800322		

AB A freeze-resistant adhesive for bonding poly(vinyl chloride) flooring to **concrete** and gypsum substrates consist of a 40-60% aqueous dispersion of vinyl-maleic-acrylic polymer [e.g., Osakryl KM (I)] 30-50, ground CaSO₄ 30-45, 37-80% aqueous methoxymethylurea (II) solution 7-15 or 55-60% aqueous II-urea solution [weight ratio 7:(5-7)] 10, maleic resin-di-Bu phthalate (III) melt (weight ratio 13:14) 10-13, and, optionally, fungicides and bactericides. Thus, an adhesive consisting of a 60% dispersion of I 30, 80% aqueous II solution 12, ground CaSO₄ 45, and resin 13 (prepared by melting Polomal MA-56 (maleic resin) 6.26 and III 6.75 kg at 130°). The adhesive was stable and resistant to frost above -20°.

IC C09J003-14

CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 42, 58ST gypsum adhesive bonding PVC; adhesive polyvinyl chloride flooring; freeze resistance adhesive bonding **concrete** PVCIT Floors
(PVC, freeze-resistant adhesives for bonding of, to **concrete** and gypsum)IT **Concrete**
(adhesion of, to PVC floors, freezeproof compns. for)IT Adhesives
(freeze-resistant, vinyl-maleic-acrylic polymer-calcium sulfate composition,
for bonding PVC floors to **concrete** and gypsum)IT Freezing
(resistance to, of adhesives for bonding PVC floors to **concrete** and gypsum)IT Cold-resistant materials
(adhesives, vinyl-maleic-acrylic polymer compns. containing calcium sulfate, for PVC floors on **concrete**)

IT 57-13-6, Urea, uses and miscellaneous 13824-21-0, Methoxymethyl urea
 RL: USES (Uses)
 (adhesives containing, freezeproof, for bonding PVC floors to concrete)

IT 84-74-2, Dibutyl phthalate 97622-45-2, Polomal MA-56
 RL: USES (Uses)
 (adhesives containing, freezeproof, for bonding PVC to concrete)

IT 107397-56-8
 RL: TEM (Technical or engineered material use); USES (Uses)
 (adhesives, containing calcium sulfate, freezeproof, for bonding PVC floors to concrete)

IT 9002-86-2, PVC
 RL: USES (Uses)
 (floors, bonding of, to concrete, freezeproof adhesives for)

IT 7778-18-9
 RL: USES (Uses)
 (maleic-acrylic-vinyl copolymer adhesives containing, freezeproof, for bonding PVC floors to concrete)

IT 107397-56-8
 RL: TEM (Technical or engineered material use); USES (Uses)
 (adhesives, containing calcium sulfate, freezeproof, for bonding PVC floors to concrete)

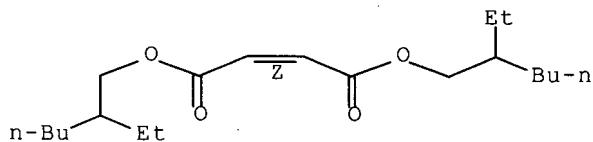
RN 107397-56-8 HCPLUS

CN 2-Butenedioic acid (2Z)-, bis(2-ethylhexyl) ester, polymer with dibutyl (2Z)-2-butenedioate, ethenyl acetate and 2-propenoic acid (9CI) (CA INDEX NAME)

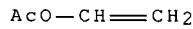
CM 1

CRN 142-16-5
 CMF C20 H36 O4

Double bond geometry as shown.



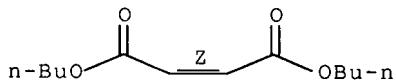
CM 2

CRN 108-05-4
 CMF C4 H6 O2

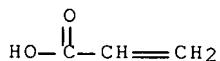
CM 3

CRN 105-76-0
 CMF C12 H20 O4

Double bond geometry as shown.



CM 4

CRN 79-10-7
CMF C3 H4 O2

L69 ANSWER 52 OF 59 HCPLUS COPYRIGHT 2007 ACS on STN

AN 1986:428891 HCPLUS Full-text

DN 105:28891

TI Waterproofing material

PA Vyzkumny Ustav pre Petrochemiu, Czech.

SO Austrian, 6 pp.

CODEN: AUXXAK

DT Patent

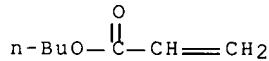
LA German

FAN.CNT 1

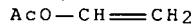
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	AT 380228	B	19860425	AT 1984-1501	19840507
	AT 8401501	A	19850915		
PRAI	AT 1984-1501		19840507		
AB	The solid components of waterproofing materials consist of cement and/or gypsum 30-60, a filler, e.g., quartz sand, basalt fibers, microasbestos, broken andesite, limestone or dolomite 35-65, and modifiers consisting of a cellulose derivative and/or acid casein 2-4, highly dispersed silicic acid and/or Ca stearate 0.5-3, and, optionally, hexamethylenetetramine and/or urea 0.1-3.5 and organosulfur compds. 0.01-2 weight parts; for each 100 weight parts solids, the material contains 10-60 weight parts of a liquid waterproofing component consisting of an aqueous emulsion or dispersion of \geq 1 copolymer formed by copolymer of \geq 2 monomers selected from vinyl chloride, vinyl acetate, C1-8 alkyl acrylate, acrylic acid, C1-8 alkyl methacrylate, methacrylic acid, acrylamide, styrene, 1,3-butadiene, maleic acid, and C1-12 alkyl maleates, with dry substance content 3-52 weight%, preferably an emulsion and/or dispersion of vinyl chloride, vinyl acetate, ternary copolymer with maleic acid, maleic acid derivative, and/or acrylic acid derivative. Thus, a waterproofing material was prepared by mixing white portland cement 51, 0.02-0.1 mm ground quartz sand 40, fine ground limestone 4, Ca stearate 0.5, and casein 2.5, Na lignosulfonate 0.1, hexamethylenetetramine 0.4, and microasbestos 1.5 weight parts, and to 100 weight parts, 20 weight parts water and 8 weight parts of an aqueous dispersion of butadiene-n-Bu acrylate-styrene copolymer (solids content 51 weight%) was added with intense stirring; the pasty material was applied as a 0.65-0.75 mm layer on a nonimpregnated concrete base to give water absorption 0 weight% after 24 h and wet abrasion of 73 min by Czechoslovakian standard test.				

IC ICM C04B028-02
 ICS C04B028-14; C04B041-61
 CC 58-4 (Cement, Concrete, and Related Building
 Materials)
 Section cross-reference(s): 38
 IT Cement
 Andesite
 Limestone, uses and miscellaneous
 Sand
 RL: USES (Uses)
 (in waterproofing composition solid component, with aqueous polymer
 dispersion)
 IT 9005-09-8 25086-98-0 25767-47-9 25838-20-4 26590-01-2 29695-42-9
 30938-41-1 30940-81-9 33750-59-3 41934-30-9
 52469-24-6 77829-80-2
 RL: TEM (Technical or engineered material use); USES (Uses)
 (dispersion, in waterproofing composition)
 IT 30938-41-1 30940-81-9 41934-30-9
 RL: TEM (Technical or engineered material use); USES (Uses)
 (dispersion, in waterproofing composition)
 RN 30938-41-1 HCAPLUS
 CN 2-Propenoic acid, polymer with butyl 2-propenoate, chloroethene and
 ethenyl acetate (9CI) (CA INDEX NAME)

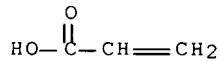
CM 1

CRN 141-32-2
 CMF C7 H12 O2

CM 2

CRN 108-05-4
 CMF C4 H6 O2

CM 3

CRN 79-10-7
 CMF C3 H4 O2

PEZZUTO

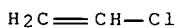
10/551268

9/18/07

132

CM 4

CRN 75-01-4
CMF C2 H3 Cl

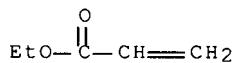


RN 30940-81-9 HCAPLUS

CN 2-Propenoic acid, polymer with chloroethene, ethenyl acetate and ethyl 2-propenoate (9CI) (CA INDEX NAME)

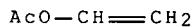
CM 1

CRN 140-88-5
CMF C5 H8 O2



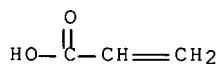
CM 2

CRN 108-05-4
CMF C4 H6 O2



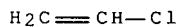
CM 3

CRN 79-10-7
CMF C3 H4 O2



CM 4

CRN 75-01-4
CMF C2 H3 Cl



RN 41934-30-9 HCAPLUS

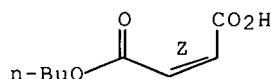
CN 2-Butenedioic acid (2Z)-, monobutyl ester, polymer with chloroethene and ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 925-21-3

CMF C8 H12 O4

Double bond geometry as shown.



CM 2

CRN 108-05-4

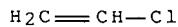
CMF C4 H6 O2



CM 3

CRN 75-01-4

CMF C2 H3 Cl



L69 ANSWER 53 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1986:94262 HCAPLUS Full-text

DN 104:94262

TI Waterproofing material or compositions

IN Macho, Vendelin; Pavlacka, Eduard; Stepita, Matej; Ondrus, Imrich; Beseda, Viliam; Gregor, Alexander

PA Vyzkumny Ustav pre Petrochemiu, Czech.

SO Ger. Offen., 16 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3418000	A1	19851121	DE 1984-3418000	19840515
	HU 40390	A2	19861228	HU 1984-2243	19840611
	FR 2566419	A3	19851227	FR 1984-9854	19840622
	FR 2566419	B3	19860606		
	DD 255849	A3	19880420	DD 1984-269495	19841114

PRAI DE 1984-3418000

19840515

AB In a waterproofing material based on a hydraulic binder, fillers, modifying agents, liquid waterproofing additives based on synthetic and/or natural macromol. materials and water, the solid part of the binder consists of **cement** and/or gypsum 30-60 weight parts, and the filler consists of quartz sand, basalt fibers, microasbestos, crushed andesite, limestone, or dolomite 35-65 weight parts and modifiers of cellulose derivs. and/or acid casein 2-4, siloxide and/or Ca stearate 0.5-3.0, and optionally hexamethylenetetraamine and/or urea 0.1-3.5 and S organic compds. 0.01-2 weight parts; the liquid waterproofing component content is 10-60 weight parts/100 weight parts, all as solids. The waterproofing component is an aqueous emulsion or dispersion of ≥ 1 copolymer of ≥ 2 monomers selected from vinyl chloride, vinyl acetate, C1-8 alkyl acrylate, acrylic acid, C1-8 alkyl methacrylate, methacrylic acid, acrylamide, styrene, 1,3-butadiene, maleic acid, and C1-12 alkyl maleate, with 3-52 weight% dry substance content, preferably a ternary copolymer of vinyl chloride, vinyl acetate, and maleic acid and/or a maleic acid derivative and/or an acrylic acid derivative. Thus, the solid, homogenized component of a waterproofing material consists of white **cement** PC400 51, 0.02-0.1 mm ground quartz sand 40 and finely ground limestone 4, Ca stearate 0.5, acid casein 2.5, Na lignosulfonate 0.1, hexamethylenetetraamine 0.4, and microasbestos 1.5 weight parts; water 24 and a concentrated dispersion of butadiene-Bu acrylate-styrene copolymer with dry substance content 51 weight% 8 weight parts was added with stirring to 100 weight parts of the solid component and the pastry material was applied to a non-impregnated **concrete** sublayer in 3 layers to a thickness of 0.65-0.75 mm. After 24 h, the **concrete** had water uptake 0 based on the Czechoslovakian standard method and wet abrasion 73 min.

IC ICM C04B028-04

ICS C04B028-14; C04B014-06; C04B014-38; C04B014-40; C04B014-46; C04B014-28; C04B014-14; C04B018-18; C04B024-14; C04B024-16; C04B024-08

CC 58-4 (**Cement**, **Concrete**, and Related Building Materials)

Section cross-reference(s): 38

IT **Concrete**

(waterproofing materials for, from copolymer dispersions and fillers and hydraulic binders)

IT **Cement**

(waterproofing materials from copolymer dispersions and fillers and)

IT 75-01-4D, polymers 79-06-1D, polymers 79-10-7D, C1-8 alkyl esters, polymers 79-10-7D, polymers 79-41-4D, and C1-8 alkyl esters, polymers 100-42-5D, polymers 106-99-0D, polymers 108-05-4D, polymers 110-16-7D, and C1-12 alkyl esters, polymers 9005-09-8 25086-98-0 25767-47-9 25838-20-4 29695-42-9 30938-41-1 30940-81-9 33750-59-3 41934-30-9 52469-24-6 77829-80-2

RL: TEM (Technical or engineered material use); USES (Uses)

(waterproofing materials from fillers and hydraulic binders and dispersions of)

IT 30938-41-1 30940-81-9 41934-30-9

RL: TEM (Technical or engineered material use); USES (Uses)

(waterproofing materials from fillers and hydraulic binders and dispersions of)

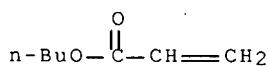
RN 30938-41-1 HCAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate, chloroethene and ethenyl acetate (9CI) (CA INDEX NAME)

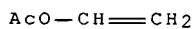
CM 1

CRN 141-32-2

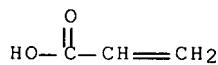
CMF C7 H12 O2



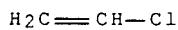
CM 2

CRN 108-05-4
CMF C4 H6 O2

CM 3

CRN 79-10-7
CMF C3 H4 O2

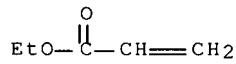
CM 4

CRN 75-01-4
CMF C2 H3 Cl

RN 30940-81-9 HCPLUS

CN 2-Propenoic acid, polymer with chloroethene, ethenyl acetate and ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 140-88-5
CMF C5 H8 O2

CM 2

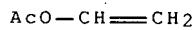
PEZZUTO

10/551268

9/18/07

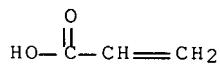
136

CRN 108-05-4
CMF C4 H6 O2



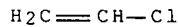
CM 3

CRN 79-10-7
CMF C3 H4 O2



CM 4

CRN 75-01-4
CMF C2 H3 Cl



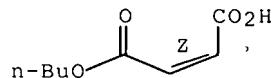
RN 41934-30-9 HCPLUS

CN 2-Butenedioic acid (2Z)-, monobutyl ester, polymer with chloroethene and ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

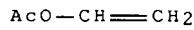
CRN 925-21-3
CMF C8 H12 O4

Double bond geometry as shown.



CM 2

CRN 108-05-4
CMF C4 H6 O2



KATHLEEN FULLER EIC1700

571/272-2505

CM 3

CRN 75-01-4
CMF C2 H3 ClH2C=CH-Cl

L69 ANSWER 54 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1982:511382 HCAPLUS Full-text
 DN 97:111382
 TI Release coating materials for frames for **concrete**
 PA Daicel Chemical Industries, Ltd., Japan; Sofuku Trading Co., Ltd.
 SO Jpn. Tokkyo Koho, 3 pp.
 CODEN: JAXXAD

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 57014285	B	19820324	JP 1974-121616	19741022
PRAI JP 1974-121616		19741022		

AB Copolymers of Me methacrylate, Et acrylate, Bu acrylate, vinyl acetate, and/or styrene with acrylic acid, methacrylic acid, or crotonic acid are dissolved or dispersed in H₂O to give release coating materials for **concrete** frames. Thus, a plywood frame was coated with a 27% solid solution of 3:97 crotonic acid-vinyl acetate copolymer ammonium salt [31942-64-0] to 90-100 g/m² and dried to form a water-resistant coating. When **concrete** was cast in the frame and set 1 apprx. 4 wk, the frame was released easily and the **concrete** surface was compatible with water-thinned coating materials.

IC B28B007-38

ICA B28B021-76; C08F020-06

CC 42-7 (Coatings, Inks, and Related Products)

Section cross-reference(s): 58

ST release agent **concrete** frame; crotonic acid copolymer release agent; vinyl acetate copolymer release agentIT **Concrete**

(release coatings for frames for, water-thinned vinyl compound-unsatd. acid copolymers as)

IT Coating materials

(release, vinyl copolymer with unsatd. acids, water-thinned, for **concrete** frames)

IT 25133-97-5 29796-14-3 31942-64-0

RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, release, for **concrete** frames)

IT 29796-14-3

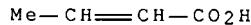
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, release, for **concrete** frames)

RN 29796-14-3 HCAPLUS

CN 2-Butenoic acid, polymer with butyl 2-propenoate and ethenyl acetate (CA INDEX NAME)

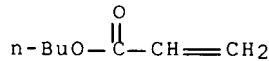
CM 1

CRN 3724-65-0
CMF C4 H6 O2



CM 2

CRN 141-32-2
 CMF C7 H12 O2



CM 3

CRN 108-05-4
 CMF C4 H6 O2



L69 ANSWER 55 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 1981:624504 HCAPLUS Full-text
 DN 95:224504
 TI **Cement** composition with improved fluidity and setting retardation
 PA Nippon Synthetic Chemical Industry Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 56092154 JP 62035986	A B	19810725 19870805	JP 1979-170980	19791226
PRAI	JP 1979-170980	A	19791226		
AB	Cement 100 parts is mixed with 0.01-1 part unsatd. dicarboxylic acid monoester-vinyl acetate copolymer (dicarboxylic acid monoester content 1-15 mol%). Thus, 100 parts portland cement were mixed with sand 300 and monomethyl maleate-vinyl acetate copolymer [25969-89-5] 0.5 part, mixed with water, molded, and hardened. Its initial and final setting times were 8 h 50 min and 11 h 15 min.				
IC	C04B013-24				
CC	58-1 (Cement and Concrete Products)				
IT	25969-89-5				
	RL: USES (Uses) (in mortar, for setting time control)				
IT	25969-89-5				
	RL: USES (Uses)				

(in mortar, for setting time control)

RN 25969-89-5 HCPLUS

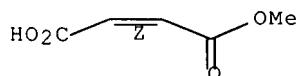
CN 2-Butenedioic acid (2Z)-, 1-methyl ester, polymer with ethenyl acetate
(CA INDEX NAME)

CM 1

CRN 3052-50-4

CMF C5 H6 O4

Double bond geometry as shown.



CM 2

CRN 108-05-4

CMF C4 H6 O2



L69 ANSWER 56 OF 59 HCPLUS COPYRIGHT 2007 ACS on STN

AN 1981:32079 HCPLUS Full-text

DN 94:32079

TI Water-absorbent vinal fibers

PA Nippon Synthetic Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 55132713	A	19801015	JP 1979-38666	19790330
	JP 61042002	B	19860918		

PRAI JP 1979-38666 A 19790330

AB Blends of a saponified unsatd. dicarboxylic acid ester-vinyl ester copolymer and poly(vinyl alc.) (I) were cast and split to give flat fibers with high water absorption. These fibers were useful as sanitary absorbents and binders for **cement**. Thus, aqueous 20% of a blend of 50 parts 5:95 saponified monomethyl maleate-vinyl acetate copolymer and 50 parts I was cast, dried, drawn 450% at 140° in the machine direction, heat-treated 30 min at 140°, and split. The physiol. saline water absorption rate for the above fibers was high, whereas this rate was low for com. pulp absorbents.

IC D01F006-50; D01F006-52

CC 39-2 (Textiles)

Section cross-reference(s): 58

ST vinal fiber sanitary absorbent; water absorbent vinal fiber; binder
cement vinal fiberIT **Cement**

(binders for, water-absorbent vinal fibers as)

IT Binding materials
 (for **cement**, water-absorbent vinal fibers for)
 IT 25969-89-5D, saponified
 RL: USES (Uses)
 (vinal flat fibers containing, manufacture of, for sanitary absorbents)
 IT 25969-89-5D, saponified
 RL: USES (Uses)
 (vinal flat fibers containing, manufacture of, for sanitary absorbents)
 RN 25969-89-5 HCPLUS
 CN 2-Butenedioic acid (2Z)-, 1-methyl ester, polymer with ethenyl acetate
 (CA INDEX NAME)

CM 1

CRN 3052-50-4

CMF C5 H6 O4

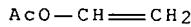
Double bond geometry as shown.



CM 2

CRN 108-05-4

CMF C4 H6 O2



L69 ANSWER 57 OF 59 HCPLUS COPYRIGHT 2007 ACS on STN
 AN 1980:605587 HCPLUS Full-text
 DN 93:205587
 TI Adhesive for bonding poly(vinyl chloride) to **concrete**
 IN Lukoyanova, A. F.; Figovskii, O. L.; Zokhin, G. I.; Storozhinskii, A. M.;
 Karlovskii, V. M.; Raigorodskii, V. I.; Kremnev, K. V.; Efimova, T. A.
 PA "Stroiplastmass" Industrial-Enterprises of Synthetic Trimming and
 Insulation Building Materials, USSR
 SO U.S.S.R.
 From: Otkrytiya, Izobret., Prom. Obraztsy, Tovarnye Znaki 1980, (17), 108.
 CODEN: URXXAF
 DT Patent
 LA Russian
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI SU 732348	A1	19800505	SU 1977-2491168	19770531
PRAI SU 1977-2491168	A	19770531		
AB	The adhesive strength and water resistance of an adhesive comprising Bu acrylate-Na methacrylate-vinyl acetate copolymer (I) [75454-37-4], rosin, thickener, filler, solvent, and water are increased and its drying time is reduced by adding a cyclohexanone oligomer (II) of mol. weight 280-400 to			

provide a composition consisting of I 15-35, rosin 3.5-7.0, solvent 1.5-3.0, II 0.3-0.6, thickener 1-2, filler 20-36 weight%, and the balance water.

IC C09J003-14

CC 36-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 58

ST PVC bonding **concrete** adhesive; acrylic copolymer adhesive PVC; cyclohexanone oligomer acrylic adhesive

IT **Concrete**
(adhesives for bonding of, to PVC, acrylate copolymer compns. as)

IT Waterproof materials and Water-repellent materials
(adhesives, acrylate copolymer compns., for bonding PVC to **concrete**)

IT Adhesives
(water-resistant, acrylate copolymer compns., for bonding PVC to **concrete**)

IT 9002-86-2
RL: USES (Uses)
(adhesives for bonding of, to **concrete**, acrylate copolymer compns. as)

IT 75454-37-4
RL: USES (Uses)
(adhesives, for bonding of PVC to **concrete**)

IT 108-94-1D, derivs., polymers
RL: USES (Uses)
(oligomeric, acrylate copolymer compns., water-resistant adhesives, for bonding PVC to **concrete**)

IT 75454-37-4
RL: USES (Uses)
(adhesives, for bonding of PVC to **concrete**)

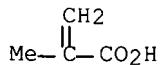
RN 75454-37-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, sodium salt, polymer with butyl 2-propenoate and ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 5536-61-8

CMF C4 H6 O2 Na

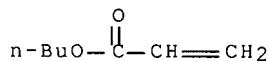


● Na

CM 2

CRN 141-32-2

CMF C7 H12 O2



CM 3

CRN 108-05-4
CMF C4 H6 O2AcO—CH=CH₂

L69 ANSWER 58 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1973:505736 HCAPLUS Full-text

DN 79:105736

TI Acrylic copolymer dispersions

IN Naarmann, Herbert; Mueller, Gerhart

PA Badische Anilin- & Soda-Fabrik AG

SO Ger. Offen., 10 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2163060	A1	19730620	DE 1971-2163060	19711218
	AU 7249948	A	19740613	AU 1972-49948	19721212
	CH 564570	A5	19750731	CH 1972-18061	19721212
	NL 7217122	A	19730620	NL 1972-17122	19721215
	IT 974108	B	19740620	IT 1972-54759	19721215
	AT 323996	B	19750811	AT 1972-10740	19721215
	GB 1404989	A	19750903	GB 1972-57930	19721215
	ES 409726	A1	19751116	ES 1972-409726	19721216
	FR 2163769	A1	19730727	FR 1972-45122	19721218
	JP 48085678	A	19731113	JP 1972-126330	19721218

PRAI DE 1971-2163060 A 19711218

AB Dispersions containing 20-50.6% title polymers, e.g. acrylamide-acrylic acid-ethyl acrylate-potassium β -morpholinoethyl maleate-vinyl acetate copolymer (I) [41941-00-8], and useful as binders for fiber fleece or for coatings for paper, textiles, wood, and **concrete**, were prepared by aqueous emulsion polymerization. Thus, H₂O 315, Na lauryl sulfate (II) 8.5, Na₄P₂O₇ 1.5, vinyl acetate 290, acrylic acid 8.0, acrylamide 2, K β -morpholinoethyl maleate 6, ethyl acrylate 195, and 25% K₂S₂O₈ 40 parts were added to H₂O 100, II 1.2, and K₂S₂O₈ 2 parts within 4 hr at 100.deg.. Cooling and addition of 5.7 parts 25% NH₄OH gave a 50.6% I dispersion, useful for coating of wood and **concrete**.

IC C08F

CC 35-3 (Synthetic High Polymers)

Section cross-reference(s): 43, 58

ST acrylic copolymer dispersion; maleate monoester acrylic copolymer; coating acrylic copolymer dispersion; binder acrylic copolymer dispersion; fumarate monoester acrylic copolymer; wood coating acrylic dispersion; morpholinoethyl maleate acrylic copolymer; **concrete** coating acrylic dispersion; pyrrolidonyethyl maleate acrylic copolymer; paper coating acrylic dispersion; textile finishing acrylic dispersion; fleece binder acrylic dispersion; polyethylene glycol maleate copolymer

IT **Concrete**

Paper

Textiles

(coatings on, acrylic copolymer dispersions as)

PEZZUTO

10/551268

9/18/07

143

IT 39420-72-9P 41941-00-8P 42476-13-1P 42476-14-2P

42476-15-3P 42476-16-4P 42503-49-1P

RL: PREP (Preparation)

(dispersions, manufacture of, for binders and coatings)

IT 41941-00-8P

RL: PREP (Preparation)

(dispersions, manufacture of, for binders and coatings)

RN 41941-00-8 HCAPLUS

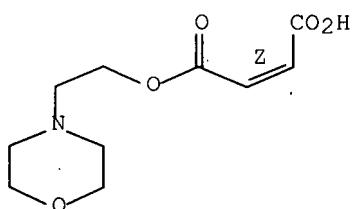
CN 2-Butenedioic acid (2Z)-, mono[2-(4-morpholinyl)ethyl] ester, potassium salt, polymer with ethenyl acetate, ethyl 2-propenoate, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 48162-90-9

CMF C10 H15 N 05

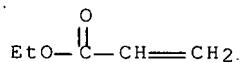
Double bond geometry as shown.



CM 2

CRN 140-88-5

CMF C5 H8 O2



CM 3

CRN 108-05-4

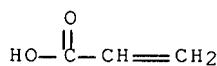
CMF C4 H6 O2



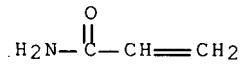
CM 4

CRN 79-10-7

CMF C3 H4 O2



CM 5

CRN 79-06-1
CMF C3 H5 N O

L69 ANSWER 59 OF 59 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1970:428476 HCAPLUS Full-text

DN 73:28476

TI Polymer-containing **cement** compositions

IN Kalandiak, Michael

PA Rohm and Haas Co.

SO S. African, 20 pp.

CODEN: SFXXAB

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	ZA 6805949		19691127	ZA	
	DE 1771962			DE	
	FR 1602457			FR	
	GB 1236263			GB	
	US 3547853		19701215	US	19670920
PRAI	US		19670920		

AB Dry hydraulic **cement** mixts. with excellent storage stability and which may be hydrolyzed to yield floor coverings, plasters, grouts, and adhesives with excellent tensile, compressive, and flexural strength were prepared by blending portland **cement** with 3-20% metal salts of water dispersible polymers with glass transition temps. >30°, Na citrate setting retarder and sequestering agent for the metallic ions, 1-5% trimethylolethane or trimethylolpropane, 5-25% Na₂CO₃, and various defoaming agents, fillers aggregates, and pigments. Water-dispersible polymers used were the Ca salt of 46:49:5 (weight %) Et acrylate-Me methacrylate (I)-methacrylic acid (II) copolymer, the Al salt of 30:20:40:10 Bu acrylate-acrylonitrile-I-acrylic acid copolymer, or the Zn salt of a 25:55:12:8 2-ethylhexyl acrylate-styrene-vinyl acetate-II copolymer.

CC 58 (**Cement** and **Concrete** Products)ST portland **cement** polymers; coating polymeric **cements**; grouts polymers; paint masonry polymers; methacrylate copolymer **cements**; acrylate copolymer **cements**IT **Cement**

Mortar

(dry storables, containing acrylic polymers)

IT 25133-97-5, uses and miscellaneous 28206-15-7, uses and miscellaneous 28803-94-3, uses and miscellaneous

RL: USES (Uses)

(cement, dry storables)

IT 28803-94-3, uses and miscellaneous

RL: USES (Uses)

(cement, dry storable)

RN 28803-94-3 HCPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenyl acetate, ethenylbenzene and 2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 108-05-4

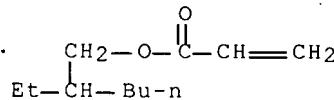
CMF C4 H6 O2



CM 2

CRN 103-11-7

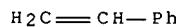
CMF C11 H20 O2



CM 3

CRN 100-42-5

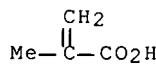
CMF C8 H8



CM 4

CRN 79-41-4

CMF C4 H6 O2



=>